May 2006

Creating video business cards

Calibrating your home theatre



Digital video cameras: A buver's guide

Vidcasts: Entertainment on the move



Ultra mobile video

Digital Imaging

Home Entertainment

Personal Computing

Total Gamer

Wireless

www.hubcanada.com

Get entertained and unconstrained

Fun is unpredictable. Never miss a beat with ASUS' stylish, thin and light W5F. The W5F exhibits revolutionary dual core performance with Intel® Centrino® Duo Technology. Built-in wireless connectivity and a 1.3 megapixel webcam puts you wherever the action is.



W5F - Stylish Ultraportable

- · intel® Centrino® Duo Mobile Technology
- 12" Ultrabright Widescreen Display
 512 MB DDR2 SDRAM
- 300 GB 5400 RPM Hard Drive

- 4x Super Multi DVD-RW DL
 1,3 Megapixel Swivel Camera
 Microsoft[®] Windows[®] XP Home



W2J - Personal Multimedia Center

- Intel® Centrino® Duo Mobile Technology
- 17" Ultrabright Widescreen Display
 1024 MB DDR2 SDRAM
 100 GB 5400 RPM Hard Drive

- ATI MOBILITY" RADEON" X1600 256 M8
 Bx Dual Layer Slot-Loading DVD-RW
 Microsoft* Windows* Media Center 2005



W3J - Performance in Style

- Intel® Centrino® Duo Mobile Technology

- 14" Ultrabight Widescreen Display
 1024 M8 DDR2 SDRAM
 100 GB 5400 RPM Hard Drive
- ATI MOBILITY™ RADEON™ X1600 256 M8
 8x Super Multi DVD-RW DL
- soft® Windows® XP Pro



A6Jc - Value and Performance

- · Intel® Centrino® Duo Mobile Technology

- 15.4" Ultrabright Display
 1024 M8 DDR2 SDRAM
 100 GB 5400 RPM Hard Drive
- NVIDIA GeForce Go 7300 128 MB
 Bx Dual Layer DVD-RW



PC Village

Infonec

www.pcvonline.com 905.889.5488

www.infonec.com

416.410.5481

Canada Computers www.canadacomputers.com

905 946 9688

Pacific Notebook www.pacificnotebook.com 905 305 6833

905.726.2807

Sonaggi Computers www.sonaggi.com 866.606.0028

The Tech Zone



© Copyright 2006 ASUS Computer International All Rights Reserved ASUS is a registered trademark of ASUSTek Computer Inc. Intel, the trial logo, the Centrols logo, and Centrols, are trademarks or registered trademarks of Intel Copyrights in the United States and other countries. Microsoft and Windows are registered trademarks of Microsoft Copyrights.

Editorial



A prophet once said "Video Killed the Radio Star."

As the first music video played on the newly conceived MTV in 1981, perhaps what the Buggles meant was that when the music video was born, the

game became about much more than just the music.

Video added a whole new level of aesthetics.

It was no longer enough to assemble a talented band, write some killer songs and make a go of it in the music business.

In the MTV era, you had to be "camera friendly" too; where previous generations listened to the radio for the latest bands, the new way was to turn on MTV (or later, Much Music) to catch what's hot.

The Buggles were a one-hit wonder. Were they still together today, they might be singing an entirely different tune, one with words to the effect of "Internet Killed the Video Star."

In fact, a quick Google of that phrase does net some interesting results with that title.

In the new-new world, it's no longer enough to assemble

(or perhaps manufacture) a band, write a computer program to spit out some non-offensive but somehow catchy pop tunes, budget a multi-million dollar video shoot and make a go of it in the music game. Now you need a flashy web site and some extensive digital rights management schemes to work in the background and keep your less tech-savvy fans from sharing your creation with the world, bypassing the retail chain altogether.

Perhaps you want to be really bold and include a root kit on your newest CD to co-opt portions of fans' computers. The point stands. Ideas, be they in music, business or personal communications, are much more powerful when they are presented with motion. Whether it's a video business card or a motion photo slideshow, the audience is more receptive and your message is delivered with more impact.

Convenient then that these and a great many other video related topics are covered in the pages that follow.

Enjoy the issue, Andrew Moore-Crispin Editor-in-Chief

Contents

May 2006

In selected regions and online

Hit the Road: Ultra-portable video

Rise of Nations: Rise of Legends

Unlock secrets on your DVDs

The camcorder dilemma: MiniDV, DVD or hard disk?

What's a wiki, and why should you want one?

Show off your images with a slide show

Calibrate good times, come on!

Finally, it may be SED

Organize your stuff

Moving to Mac: Intel Inside

Vidcasts: Video to go





DIGITAL

LIVING

Volume 19 : Number 05

EDITORIAL Editor-In-Chief

Andrew Moore-Crispin andrew@poublishing.ca

Editorial Assistant

Erin Bell erin@ppublishing.ca

Contributing Editors

Sean Carruthers Lee Rickwood Marc Saltzman David Tanaka

Advertising Sales Sales Manager

Ralph Ventriglia ralph@ppublishing.ca

National Account Executive Maria Favot maria@ppublishing.ca ONTARIO/TORONTO

Ad Sales

Karim Rizk karim@ppublishing.ca Dan Wojtkiewicz danw@ppublishing.ca

Jack Fan jack@ppublishing.ca Peter O'Desse

MONTREAL

peter@ppublishing.ca Anthony Buttino anthony@ppublishing.ca

WESTERN CANADA

Vivian Jin vivian@ppublishing.ca Jason Hay jason@ppublishing.ca

Business Group

President/Publisher Scott Piccolo scott@poublishing.ca

Director of Marketing

Angela Colizza angela@ppublishing.ca

Art Director

Steven Stoner steves@poublishing.ca

Production Assistant

Production Coordinator Christie Swail christie@ppublishing.ca Liz Van Der Wee

Distribution Manager

liz@ppublishing.ca Mark Backer

Office Administrator

mark@ppublishing.ca Malenie Rajaram

IT Manager

malenie@opublishing.ca Steve Quinney steveq@ppublishing.ca

Piccolo Publishing Inc (Head Office) 775-B The Queensway, Toronto, ON, MBZ 11 Tel: 416-348-9666 Toll-free: 866-757-0129

Fax: 416-348-9553

Canadian Publication Mail,

Sales Product Agreement #41037518. Printed in Canad ISSN 1710-0143 HUB: Digital Living (B.C. ed.) ISSN 1710-0151 HUB: Digital Living [Calgary ed.] ISSN 1710-016X HUB: Digital Living (Edmonton ed.) ISSN 1710-0178 HUB: Digital Living (Eastern ed.) ISSN 1710-0186 HUB: Digital Living [Montreal ed.] ISSN 1710-0194 HUB: Digital Living (Prairie ed.) ISSN 1710-0208 HUB: Digital Living (SW Ont, ed.): ISSN 1210-0215 HUB: Digital Living (Toronto ed.).
HUB: Digital Living is published monthly by Picco
Publishing Inc. All rights reserved. Reproduction. whole or in part without the permission of the pub isher is strictly prohibited. Information prese rate, however, the publisher assumes no responsibeing for errors or consistents. The publisher reserves the right to refuse ails. The opinional expressed in the articles and columns and ads are those of the writes advertiser and not necessarily. those of HUB, Digital Living.

www.hubcanada.com

Hit the Road: Ultra-portable video

Lately there's been a lot of talk about portable video players and the ability to watch your favourite television shows and podcasts no matter where you go, but there's another kind of portable video: the ability to record video no matter where you go.

There are a number of different types of video cameras out there. The most popular type is still undoubtedly the MiniDV camera, with DVD cameras certainly picking up steam. Both of those types of cameras can still be a bit bulky, because they require moving media and the mechanical transport inside to make sure everything is moving properly. That's why — if you want to be truly portable — you might consider a solid state camera.

Solid state cameras make use of flash memory technology. That's the same type of memory used by the majority of digital still cameras out there.

Until recently, flash memory wasn't quite up to the task of recording video, because its write speed was too low for anything but rudimentary-quality video. Ongoing improvements in flash memory have now made it feasible for flash to be used for full-motion video and even high definition video.

The downside is that flash-based video cameras aren't exactly cheap, especially if they record in high definition. Worse, flash memory cards will still only hold a limited amount of data on them at this point, so you may find yourself stocking up on removable memory cards if you don't want to have to offload your video to a notebook computer several times a day. You can get a 266 SecureDigital (SD) card for around about \$250.

Samsung SportsCam Extreme SC-X210L

www.samsung.ca \$699 (approx)

Samsung's SportsCam Extreme is one of my perennial favourites for one key reason: in addition to a 10x optical zoom lens built right into the body of the camera, it comes with an external lens module that you can strap around your arm or your head in order to record yourself tearing down a ski hill at a

SIN DEFEIS

zillion miles an hour.

This new model bumps up the internal memory to 16B, but if you want to add more, there's a SecureDigital slot hidden behind a door on the front of the camera. The camera's capable of shooting in DVD-quality MPEG-4 [720x480, at up to 30 frames per second].

At two inches, the LCD screen is tiny, but it does the job.

As with previous models, the SC-X210L has multiple functions, including digital still pictures, MP3/WMA playback, and the ability to function as a webcam when connected to your computer via USB 2.0.

Sanyo Xacti VPC-HD1 www.sanyo.ca \$1,099



Sanyo's Xacti lineup features some of the best-designed solid state video cameras on the market: they come with a fairly natural handgrip that gives easy access to all of the controls, which are located in a comfortable place for the thumb to reach. The new HD1 model bumps up the specs of the Xacti line to include full HD recording (720p, or 1280x760 resolution) and 5.1 megapixel still images. The Xacti VPC-HD1 features a 2.2-inch OLED screen.

The camera accepts SecureDigital memory, but the bad news is that SD cards are sold separately. You'll want to buy as large a card as you can afford, since a 2GB card will only hold 29 minutes at best quality.

One of the camera's more interesting capabilities is the ability to capture a digital still photograph while recording a movie. There is a penalty though: when the camera takes the digital photo, there will be a slight pause in the video as the photo records to the memory card.

The HD1 comes with a charging dock that also has component output, allowing you to view your videos on your high definition television.

By Sean Carruthers

Solid state pros and cons

Pros:

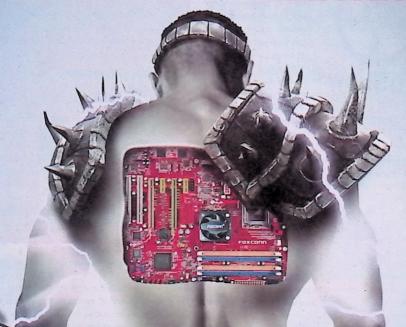
- compact
- no moving parts to wear out
- · often double as still cameras and even MP3 players
- no need for real-time video capture files are drag-and-drop
- · high-def models available

Cons:

- · focus and exposure not as fast as on full-sized models
- can't fit much best-quality video on even the highest capacity memory cards (and high-capacity cards are expensive)
- smaller form factor means small hand jitters are magnified more than with full-sized cams
- · high-definition models expensive

FOXCONN®

THE CHOICE OF CHAMPIONS



975X7AA-8EKRS2

Support Intel® Pentium® EE, Pentium® D, Pentium® 4, Socket T (LGA 775) Intel® 975X Express + Intel® ICH7R

FSB 1066/800 MHz

Dual channel DDR2 800 (OC)/667 x4 DIMMs with ECC, max 8GB

2 x PCle x16, 2 x PCle x1, 2 x PCl

6 x Serial ATAII with RAID 0, 1, 5, 10

7.1 channel, Realtek ALC 882H (HDA)

Dual GbE LAN, Dual Marvell 8055 (PCIe)

2 x 1394a, TI TSB43AB22APDT (1 x rear port + 1 x header)

Exclusive FOX ONE Technology





Vancouver:

WAPAC CANADA #450-5600 Parkwood Way

Richmond, BC V6V 2M2 www.wapac.net

www.wapac.net 604-232-4688 Toronto:

SINOTEK 401 Bentley Street, Unit #2

Markham, Ontario L3R 9T2 www.sinotekcanada.com 905-513-8266 Toronto:

Mini-Micro

110 Torbay Road, Unit #2 Markham, Ontario L3R 1G6

www.mini-micro.com 416-321-8898 Montreal:

Mini-Micro

5686 Thimens Blvd. St-Laurent, PQ H4R 2K9

www.mlni-micro.ca 514-332-3380 Quebec:

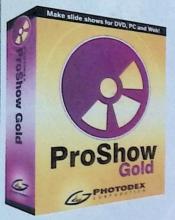
ALPHAWARE

514-333-7988

1874 Beaulac

Ville Saint-Laurent, Quebec H4R 2E7 www.alphaware.ca

Show off your images with a slideshow



Living digitally means easily sharing anything on your computer, including photographs. Whether you email your latest pics, post them to an online album site or have people crowd around your computer, instead of just a random set of images, why not make a slideshow?

Slideshows combine text titles and captions, images, and music [and sometimes spoken commentary] and are therefore a very rich method of telling an

engaging story. Slideshow software packages range from free to a few hundred dollars and vary in capabilities. ProShow Gold 2.6 from Photodex Corp. (www.Photodex.com) is one of the top performers, relatively simple to use but offering a lot of power for a reasonable price. You can download it for US\$69.95 or if you buy the boxed product, you also get a printed manual.

There are a handful of features that add pro-level sparkle to your presentation and ProShow implements them into an interface that's easy to use. The workspace is similar to that of a video editor, so you drop images into one time line and audio into another. Icons for transition effects appear between the images. The level of customizability that this package offers is very impressive – right-mouse click on an image and a detailed panel opens with all the options available to you. I found using this package to build long or short slide shows very satisfying. Some of those killer features:

Transition effects: Transition effects change how one image is replaced by the next. For example, in a dissolve images appear to meld into each other, softening their flow. ProShow Gold has a few hundred [280 says the All you wanted to know about Photoshop's filters
Photoshop Filters Encyclopedia

By Roger Pring

SBN 0-596-10021-3 Soft cover, 192 page

Profeshop has so many special effects filters that it's often hard to remember what they on Phonoshop Filter Effects Encyclopedia makes a easy to keep track. Each effect has a "how it works" explanation of the



by-step account of the effect being applied to a phote. The examples are well chosen for the most part, and found myself often thinking as I went through the book, "so that's what that filter is good for." The table of contents and thorough index make organized searching easy, but just leafing through of random is a pleasure in itself.

company) and if you wanted, you could use a different transition between every image.

Motion effects: ProShow has three motion effects – zoom, pan and rotate – to give the illusion of motion to still images. These can be applied individually or in combination, and you can also alter how the effect plays out [slow to fast, constant, fast to slow, etc.].

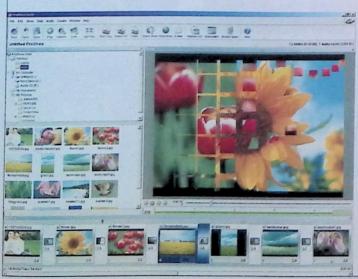
Audio and Synchronization: With the single audio track you can't do true multitrack audio mixing, although there is a way to add a narrative comment

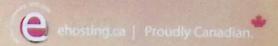
to slides by using a microphone plugged into your sound card and recording directly into ProShow. To my mind this is the weakest part of the program. Otherwise the audio options are quite decent. You can set the images and music to end together, or you can have a group of images fit within a specific audio segment, or you can manually synchronize each image individually to the beat of the music.

Output and packaging: ProShow's output options are impressive, ranging from creating a menu-driven DVD that can be viewed on a DVD player hooked to a TV set through other options like Video CD, right down to a low-res version that can be emailed.

Overall, this is a fun package to use, but also a powerful one. I especially like the easy way you can combine transition, motion and image effects into some amazing sequences — rapid fire hard cuts for action slowing into a lazier pace with images dissolving into each other for an entirely different mood.

By David Tanaka





Launching your Stores online in only 7 clicks!

Imagine your sales, marketing, and billing teams all included in the whole package.

Sell 1,000 items online
Free SSL certificate
Canada Post, FedEx, UPS Integration
Customizable Store Front

Sign Up Now

Web Hosting + Email + Stores

*1795 only 795 Domain Name

FREE Double Storage



Call us at 1.866.738.2077 or visit www.ehosting.ca/hub

Looking for Shared Hosting Plans?

PREE DOUBLE WEB STORAGE + Free Domain

Perfect for Starters

595

100 MB. Scripting



100 MB

Perfect for Database. Blogs

*Q95

250 MB. Scriptin



250 MB

Parfact for Multiple Wahritan

4995

1.5 GB. Datab



500 MB

The Pick Variet Schliege is skylin in normal to stands at more parameter, or more than in the pick of the control of the stands in the stands

DV, or Not DV

The Future On Demand: Developments in Digital Video

Making a great quote about the future is a real challenge; just ask Bill Gates. The risk is that you will be partially contradicted – if not totally blown away – by the time we see the sun again.

These days, one of my favourite future quotes is from William Gibson: "The future is already here — it's just unevenly distributed." $\,$

As exciting and paradigm-shattering as developments in digital media techniques and technology are, they of course do not come from nowhere. People are already working today with what will be a hot new gadget tomorrow.

The cool tool release cycle is a complex affair, influenced not only by technical capabilities, but by market realities and corporate priorities. It's often a trickle down affair, with core functions defined in military and medical test labs, or advanced academic and technical research facilities. Such new technology reaches the marketplace after scaling – or dumbing – down certain features for end user applications. Then, clever and creative customers find their own app, make their own mods and develop whole new

uses for the technology, and the cycle continues. Just look at what's happening with the iPod.

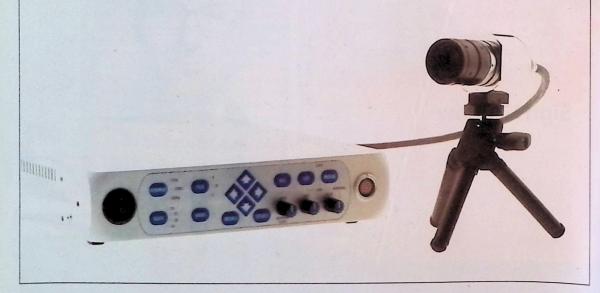
Starting as a fairly simple – some would say derivative – portable listening device, it's now a key component of the digital living room, the jumping off point for a media-on-demand world, even a defining symbol for a new generation.

Which brings up another future quote, from Sir Winston Churchill: "The empires of the future are the empires of the mind."

From the first images crudely created on a cave wall, to today's diverse and dynamic digital landscape, it's the hand, eye and mind that combines humanity with technology to create real change.

So what will you do with some of these new tools?

Super (or Quad) Definition TV: So you think HD is all the rage? New, even higher resolution displays are coming, with upwards of 1,600 lines (compared to today's 1080) of video information. Addressable pixels, for those who count, will increase to 3840x2160 from today's roughly 1280x1080 (or 720).





Digital Imaging

So don't be at all surprised to see TVs (can we still call them that?) continue to grow in size, features and functions over the next little while, much as personal computers have grown in size and capabilities in the past few years. Not just resolution, but storage, broadband and wireless access, control centre capabilities and more will be added.

For those wondering what type of camera will fill such a display, not to worru:

There are some folks at a company called Red Digital Cinema (www.red.com) working on what seems to be a 4K digital movie camera, about twice what top of the line products on the market now offer. Using a

CMOS type sensor, the word is that the Red camera will deliver 60 fps, uncompressed 4:4:4 video, or compress it down to a much more familiar 720p and 19 Mbps.

Another company called Iconix Video (www.iconixvideo.com) will soon deliver on its promise of a new high definition camera head, weighing about 2.5 ounces. For a proposed price of \$16,000 (lots of money to most of us, but barely a ripple for high end broadcasters or filmmaker) the multiform HD POV camera will capture video as 720p (actually about 700 lines) and 1080i (roughly 900 lines), and in frame rates of 24, 25, 30, 50 and 60 per second.

Clone Your Windows XP Drive in Seconds!

Portable & Desktop Cloning Devices



Computer Data and Forensic Cloning Devices

- Clone any drive
 or operating system
- Copy up to 10 drives simultaneously
- Duplication speeds up to 3.5 GB/minute
- Portable units for field service technicians
- Bench units for high-production environments
- Clone 1.8", 2.5", and 3.5" PATA/SATA hard drives
- Clone USB, CompactFlash, SD, MD & more

Print & Burn Lots of CDs & DVDs

Disk Publishing Systems



CD & DVD Disc Publishers & Printers

- Up to 400 disc capacity
- Up to 4 high-speed DVD/CD drives
- Up to 4800 dpi colour inket/thermal printing
- Blu-ray duplicators are also available
- Optional 19" 4U rack mount units
- Compatible w/business card & mini CDs
- Back-up & archival configurations

Duplicate Your Data Tapes At High Speeds

TapeMaster Duplicators



TapeMaster Data Tape Duplicators

- Duplicate any data tape format
- Standalone automated or manual devices
- Copy your back-ups
 for off-site storage
- Migrate your data from old to new tapes
 - Copy from any tape type to another type
 - Eliminate the need to run multiple back-ups
 - Copies 4MM, DLT, SDLT, LTO, AIT & more

1-800-367-3054

cansales@storageheaven.com www.storageheaven.com

Secure, Fast & Reliable Storage Solutions

Tornado Storage Arrays



Tornado Rackmount & Tower Storage Arrays

- Up to 8 terabytes in one 3U enclosure
- Easy to manage, browser based GUI
- Imaging, AV Streaming. DVR applications
- Virtual tape and disk-todisk configurations
 - Database, email & web server applications
 - High performance file server w/clustering
- Sercel seismic data acquistion solutions

STORAGE

Olympus has shown its extra high-resolution video system - camera and recorder - that acquires 1,600-line images with four 8.3 million-pixel HD image sensors; the company calls it "Ouad HD" or "Octavision." depending. The output of the camera is said to be 3840x2160 with over 1.600 TV lines of horizontal resolution (but it weighs about 20 pounds).

Companies like Thompson, with its Viper camera, and our own Canadian manufacturer, Dalso, also have 4K super high resolution cameras, and the trend to higher res acquisition and presentation will definitely continue.

Sony, for example, is showing its 4K digital cinema projector res sustem with 10,000 lumen brightness rating, RAID storage, remote control and 16



audio channels built-in. It will hit the market with a suggested price just under \$100,000. Its weight and price are a little more than most home theatre enthusiasts might bear today, but tomorrow is on the way

Digital technology always gets cheaper, more functional, and smaller especially if the projector from Light Blue Optics is any indication. Expect that but he end of the year, a new generation of pocket-sized digital video projectors will be available, offering full colour imagery at resolutions up to

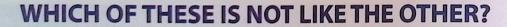
Incorporating laser projection and computer-generated holograms [CGHs], the new projectors are a technological alternative to conventional image projection, and are so small that a tiny projector producing large images could, for the first time, be integrated into a laptop, a PDA, or even a mobile phone.

Smaller digital bits and bytes aside, developments in nanotechnology and molecular manufacturing will shrink tomorrow's tools even further

Geneticists and chemical engineers at the University of Toronto recently presented a fascinating lecture on the molecular movie, and the ways that are being developed to directly observe how atoms move in real time. To make such a movie, scientists and researchers have developed a new tune of camera that uses electron pulses to light up atomic motion. It has a shutter speed of 100 femtoseconds or 1/10th of a millionth of a millionth of a second.

Right now, the applications are for chemistry, biology and physics - but Churchill and his followers may have something to say about that!

By Lee Rickwood





Search for products and compare retailers at www.pricecanada.com/hub









RS482-M

Socket

Socket 939

Processor Chipset

ATT® RS482+SB400

Memory

Dual-Channel DDR
DDR400/333/266 DDR SDRAM

Graphics Communication

On Chip Radeon X300 based

Others

10/100 LAN Serial ATA, 6-Channel Audio

RS482-M754

Socket Socket 754

C. ST

Processor AMD® AthlonTM 64/ SempronTM

Chipset

ATT® RS482 & SB400 Single-Channel DDR

Graphics

DDR400/333/266 DDR SDRAM On Chin Radeon X300 based

Communication

n 10/100 LAN Serial ATA 6-Channel Audio

KAI MVP

Socket Socket

Socker 939

Chipset

AMD® Athlon™ 64/Athlon™ 64 FX XTI RD480 + SB450

Chipset

Dual-Channel DDR

Memory

DDR400/333/266/200 DDR SDRAM

Graphics

ATI Radeon® Xpress 200 CrossFireTM

Communication

Dual LAN

Others

IFEE 1394A, Serial ATA,

8-Channel Audio

PA1 MVP

Socket Socker 775



Processor Intel® Pentium 4/Pentium D

Chipset ATI RD-400X + SB450

Dual-Channel DDR2

Memory Graphics DDRZ 667/533/400 DDRZ SDRAM

Communication

VII Radeon® Xpress 200 Crossl-ire IN

Communi

on Dual LAN

Others

IEEE 1394A, Serial ATA,

8-Channel Audio

Distributors:

ASI (905)-470-1000 Daiwa (905)-940-2889

Mini-Micro (416)-321-8898

Retailers:

Tomken Technologies Corp. (905)-625-9889 Premier Computer Canada (416)-251-2215 Real PC (416)-321-1811

PC Village (905)-889-5488 Inmax Computer TCI Data System (416)-975-8886 (416)-281-5595

3P Computer (416)-416-7214 BM Electronics Computer Depot Corp. (416)-923-3368 (905)-804-1600

Sonaggi Computera (416)-850-9742 Guntai Ware Inc. (905)-940-0333 Lu Computers (416)-446-7828

60005 Eteoprup Computer Systems All Rights Reserved All Nademans are properties of their respective holders, breith Frenhands are queed by lines (AVCIA is aloned by NVCIA Companium, AUDI is aloned by Advance More Devices, for AT^{VIII} is owned by ATI Spronsippe on Climan ATI models (Sections) are provided by SCORET COM.



Advancing Ahead



"The ECS C19.A SLI is a motherboard for the linel user on a budget and offers a very solid performance oriented planform for general usage and gaming" (Anandsech, March 2006)

"The best way to get an award is by offering good features for the market level, great stability, excellent performance, configuration flexibility, and low price. The Elitegroup C19-A SL1 offers the greatest value by putting all those into a single product." (SvsOpt – April 2006)

- LGA775 Socket for Intel Pentium® D
 Pentium® 4 / Celeron ® D CPU
- ◆ NVIDIA C19XT + MCP51 Chipset
- * 4 DIMM for Dual DDR2 667 (max. 4GB)
- 2 PCI Express x16 slots
- Gigabit LAN, Senal ATA II







Digital Imaging

The camcorder dilemma: MiniDV, DVD, or hard disk?

In a perfect world, advances in camcorder technology would always lead to image improvement. In the real world that just isn't the case.

For proof, we need look no further than the video camera's industry's current shift towards DVDs as a storage medium. Simply stated, DVD camcorders don't deliver video that is any clearer, sharper, or more colourful than that made possible by MiniDV technology. In fact, DVD camcorders can't match the quality video produced by high-end, high-definition MiniDV video cameras.

So why would anyone choose a DVD camcorder? Part of the reason is perception. For several years consumers have been told that DVD offers the best video quality available, providing higher definition and better colour accuracy than VHS. So, when DVD camcorders started appearing on the market many people assumed that they must be a step up from MiniDV, which, like VHS, is a tape-based technology. That's simply not true.

However, many consumers who understand the risk of slightly inferior picture quality are choosing to purchase a DVD camcorder anyway. Why? Ease of use.

MiniDV can be a difficult technology to work with. First there's the constant winding of tape to try to find the clip you're looking for. Then there's the issue of transferring your video to your PC with the best picture quality possible, which involves choosing the proper connections and plenty of waiting time as the MiniDV tape plays and your PC records.

DVD camcorders, on the other hand, make searching for clips as easy as selecting scenes in a movie played on your DVD player. And most users find copying files to a PC from a DVD to be a far more intuitive process than transferring video stored on MiniDV tape.

So, now that we have the whole MiniDV/DVD issue cleared up, let's open an entirely new can of worms with another burgeoning video recording technology: hard disk.

It's been a long time coming, but direct-to-hard-drive video is finally here. The advantages are obvious: there are no tapes or discs to mess around with, it provides the ability to record longer durations of uninterrupted video (up to almost 40 hours on some models), and it makes scene editing and file transfer a breeze.

The disadvantages? A higher price tag, for one. Just like a 606B iPod costs hundreds of dollars more than a 46B model, so too does the price increase for hard disk camcorders with larger storage capacities. An even more pressing problem is that hard disk camcorder manufacturers have



Digital Revolution!

BUITOKO



LX351

3.5" HD MPEG4 Media Player



DVD Jukebox



Multi-Format Video



External Storage



Digital Audio Jukebox



Digital Photo Album



Mobile Theater



WLB5054AIP

802.11g 54 Mbps Dual Antenna Broadband Router



WLB5254AIP

802.11q 54 Mbps **Broadband Router**



MWB2240AIP

802.11a 240 Mbps Broadband Router with MIMO Technology



ENC2020HD

USB 2.0 2.5" HDD **Enclosure** with Docking Cradle



WLB5254USB

802.11g 54 Mbps Wireless **USB** Adapter



3.5" Hard Drive DivX/MPEG Player with wireless network function

ZIO products are available at your local Canadian reseller. For more information on where to buy, please contact info@hantechcorp.com or 905-475-9339

For complete specs on all ZIO products visit www.globalzio.com



ZIO is distributed in Canada by Hantech Corporation Dealers contact

info@hantechcorp.com or 905-475-9339

uet to figure out a way to achieve picture quality on par with MiniDV and DVD camcorders. Yet another hitch is finite hard disk storage. What do you do if upu're on vacation, fill your hard disk, and have no way to download uour video to free up space? Delete video? Buu another camcorder?

The take-home message is simply this: a single, perfect camcorder doesn't exist - uet. You'll have to weigh the pros and cons of each category - MiniDV, DVD, and hard disk - and determine which fits your needs best. To help you get started, here are a couple of models from each group worth checking out.

MiniDV

Canon Flura 100

www canon ca

The flagship model in Canon's affordable MiniDV line-up, the \$500 Elura 100 allows users to shoot in widescreen format, delivers an 800x digital zoom, and provides functionality for users to shoot 1.33-meganizel still images while recording.

Sonu HDR-HC3 Handucam

www.sonustule.ca

A prosumer camcorder running around \$1,500, Sony's HDR-HC3 Handucam captures widescreen images in true high definition and comes equipped with several handy extras, such as cool 240 frames-per-second slow motion mode. It's also capable of snapping off impressively clear 4megapixel photographs.



DVD

Samsung SC-D165

www.samsung.ca

This \$650 model from Samsung is an entry level DVD camcorder squarely targeted at casual users who want minimum hassle. It supports all recordable DVD formats, has a 4-in-1 memory card slot, comes with a remote, and is compatible with PictBridge devices.

Canon DC40

www.canon.ca

It took Canon a while to get into the DVD game, but they got off to a great

www.NotebookForum.ca

CanadaSvs (Retail) EverChannel (Dealers)

\$43

789 Lawrence West Tel: (416) 781-7738 Open 7 Days Now

Dufferin

#4, 7080 Warden Tel: (905) 307-7738 Open 7 Days

404 Warden Steels Ave

Scarborough 2931 Lawrence East Tel: (416) 269-7738 Sunday Closed

Lawrence Brimley

Business Hours Monday -- Friday: 11am -- 7pm Saturday: 11am -- 6pm; Sunday: 11am -- 5pm

Best Deals Guaranteed, www.CanadaSys.com



X550 / X1300Pro..\$87 / 118

MSI 6600GT 128E....\$176

Asus 7600GT 256E...\$242

DVD Writer

LG 16X...

USB, Firewire I/O USB 2.0 Hub, 4-port....\$12 USB 2.0 Card reader....\$12 USB 2.0 Card, PCI / PCMCIA. Firewire Card, PCI / PCMCIA\$13 / 18 Digital Media USB Drive 512M / 1G.\$29 / 44 SD Card 512M / 1G ... \$25 / 39

DDR Memory 1024M DDR400... \$87 512M DDR400. \$45 1024M DDR2 533 Dual Channel. 1024M DDR2 667 Dual Channel. 2048M DDR2 667 Dual Channel... **Power Supply** Generic 400W ...

450W Dual fan... 529 ThermalTake 430W / 480W.....\$45 / 77 Network product Cable Router... \$21 Rwiress G Router...\$53

wireless G USB / PCI / PCMCIA For options, check website.



cer 5003WLMI \$919 Turion ML32, 512M, 100G 15.4", ABG, DVDRW, XPH .. Acer 5672WLM1 \$1459 Duo T2300 1.66G, 1024M, 100G, 15.4" WXAG+, DVD+/-RW, 56K, 802.11ABG, ATI X1400 128M, XP Home, Bluetooth, Gigabit LAN

Acer 8204WLMI 52349 Duo T2500 2.0G, 2048M, 120G, 15.4" WSXAG+, DVD+/-RW, 56K, 802.11ABG, ATI X1600 256M, XPPro. Bluetooth, Gigabit LAN

Acer Farrari4005 \$2299 Turion 64 3700+ / 1024M 100G / 15.4 WSXGA /802.11G Combo / 802.11G / Gigabit L DVDRW / ATI X700 128M / Bluetooth / XP Pro

Asus Z70VA

Centrino 2.0 \$1653 15.4" (1680 x1050) / 512M 128M ATI X700 PCI-Express 60G 5400r 16M/ DVD-CDRW Wireless-G / Gigabit Lan

Asus Z83V \$1754 Centrino 2G / 60G 5400r 16M 512M DDR2 / 17" WXGA 128M ATI X700 / Camera DVDRW - DL / Bluetooth Wireless / Gigabit L / Case TV tuner / Remote Control Win XP Media Center Ed.

Asus Z33A Centrino 1.7 / Combo / 12 60G 5400r / 768M / 802.11G

Asus 261A Centrino 1.7G / 14.1° XGA 512M DDR2 / 60G 5400r 16M

For options, check website,



Sempron 3000 \$307 Asus K8V-MX / 256M 400 80G / 52X CDRW...

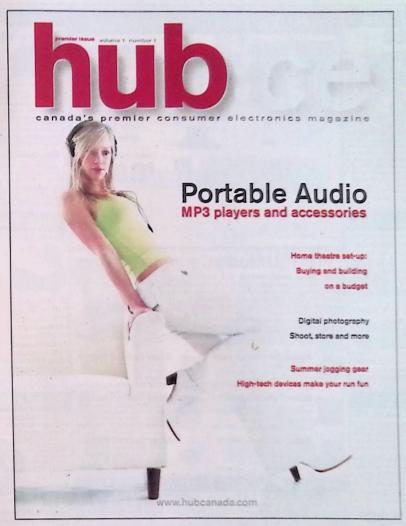
Athlon64 3200 \$739 Asus A8V-E SE / OCZ 1G X550 256M / 160G SATA II 450W 2-fan Power Supply DVD Burner / DVDROM

Celeron 2.6G \$297 Asus P4S8X-MX / 256M 80G HD / 52X CDRW.

Intel P4-3.0G \$749 Asus P5GD2-X / 1G DDR2 X550 256M / 160G SATA II 450W 2-fan Power Supply 16X DVD Burner / 16x DVD Keyboard / Optical Mouse Altec Lansing Subwoofer

savings & options visit www.CanadaSys.com For more

Coming soon...



to a street box near you

With 60,000 copies across Canada, hub:ce's goal is to make the process of buying consumer electronics easier by helping readers make informed choices on their next ce purchase, whether it be an mp3 player, pda or the latest plasma tv.

hub:ce will show readers how to integrate this new technology into their lives as well as make better use of technology they already own.

www.hubcanada.com

Our 17th Year

550 Alden Rd., Unit #110 Markham, Ontario L3R 6A8 Telephone: (905) 470-1425 www.greytech.com

GREY * TECH

Directions & Hours

5 Lights North of Steeles Avenue 1 Block West of Warden Avenue Hours: Monday - Friday: 9am - 6pm Saturday & Sundays: Closed June 1st and 2nd: Closed

Video Editing Package

8 ms

whele P4 520 Dual Core processor = 1024mb 667Mhz DDR2 memory - Jacs motherband with 6 channel audio, gigatyte lan, and 6 USB ports - 15002 Suspar SMA) hard disk- x3000 video controller = Firewire. S-Video, and composite capture control videowork 15m Smg gaming LDD depty (M3002) — or intervenewith 12m ording - 1300 quet power supply our of in millional keybourd and option moose - Process — or 7000 burns - Alact Larring speakers with Sectional cert- Windows 37 Home - Merce earlier services some services of the effective of the services of ers with sub-amilier-Windows AP Home - Nero burning softer - Finnacle Studio 10 video editing burde - Two years parts and labour warranty Package as listed (#059651) \$1279.00

LASER PRINTERS

Samsung Multi-Fuction Laser Fax, Scanner, Printer, and Copier

\$28895



1320 (22ppm/1200 dpl) ... 2600n (lan/colour/8 ppm/600dpi) 41795 3600n (lan/colour/16 ppm/600dpl) .. 4250 (45 ppm/1200dpi)

POCKET PC'S HP Phone & Pocket PC

Windows Mabile Pocket PC
with bull-in cell phone, GPS
receiver, video & music
player, keyboard, Bluetooth,
digital camera and more

580° Ponket Excel included

HEWLETTPACKARD	33.0
Ipag 1710 (203Mrz 25mb)	289°
Ipag 2190 (212Mrz.60mb.Bluetooth	3579
Ipag 2490 (520Mrz 00mb Blue W/F) .	447
Ipag 2750 (624Mhz, 128mb, Blue Wif	5689
Ipag 2790 (624Mhz. 144mb. Blue/Wif	
Ipag 4700 (624Mnz, 192mb, BlueWif	
Ipag 6515B (212Mrz, 128mb Phone Bil	
TomTom GPS Bluetooth addon Kit	
PALM COMPUTING	
Z22 (200Mhz, 20mb, Colour)	1249
E2 (200Mrz 20mb, Bluetooth, Colour)	2179
TX (312Mhz,100mb Bluetooth/Wifl)	3389
LifeDrive (416Mhz.4GB.480x320) Mo	
Organizer, WiFi, Bluetooth, Email and more	
3207na Paim GPS Navigator kit with	
CDS recover and Canadal IS mans	

Intel Dual Core Computer Bundle



Intel Pentium-D Two processors is one sneket

> without the cost! It's fully automatic and works with all applications

DVD Writer Included!

Complete Package...

889 Online Part #GT-SVSOSQR41

- Nero Express DVD software Microsoft Windows XP Home edition
- -Two years parts and labour warranty

Acer Centrino-D Notebook

Intel 1.6Ghz Centrino-D, 512mb, 80gb drive, 15.4" wide display, 950 graphics, XP Home, Wireless LAN, DVD Writer

AC-4202WLMI-H \$1101.95

Acer Centrino-D Notebook

Irtel 16Grz Centrino-D, 1024mb, 10ugo drue, 15.4" wide display, 950 graphics. Wireless LAN, DVD Writer

AC-4202WLMI2-H \$1248.95

Acer Centrino-D Notebook

intel 1.6Ghz Centrino-D, 1gb, 100gb drue, 15.4" wide display, Windows XP Home, Wireless LAN, DVD Writer

FUIITSU Media Center Enjoy photos, music, videos and more. ujitsu s new N3530A powerhouse features Intel's new Duo Centrino libile technology and a colour enhanced 15.4 inch wide screen display. Optional TV tuner lets your record and edit TV programs Specifications: Intel Centrino Dun 1:66Grz, 512mb DDR2 667Mrz memory. 80gb hard drive, 15.4" display, ATI X1400 641128mb graphic controller, DVD CD Whiter, ABIG Wheless networking, Intel 945 chipset. 9 Cell Lithium Ion battery, Microsoft Windows XP Media Center Edition.

- Built-in 10/100/1000 LAN

. furtamels mount count

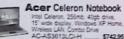
- ATI X300 gaming controler

- Delize mid tower case with INR

. Heavy duty quiet nover supply

Fulltsu Centrino Notebook

1.7Ghz Centrino , 512mb, 80gb drive, 15' wide display, Windows Media Center, Combo Drive FU-N3410A-MCE \$1312.95



512mb of tast DDR2 memory

120GB Seagate 7,200 hard drive
 Acer 17" 12ms LCD flat panel display

Acer Centrino Notebook

Intel 2 0Ghz Centrino, 512mb, 80gb drive, 15' display, Windows XP Pro, Windows LAN, DVD Writer AC-4654LMI-P \$1665

FLASH MEMORY COMPACT FLASH (CF)

FU-N3530A

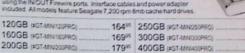
FLASH DRIVES **USB PORTABLE DRIVES**

AC-AS5672WLMI-H \$1502.95

Ingstan 512mb . 33° Sandak 512mb . 50° Apacer 512mb . 38° Lexar 100x1gb . 119° ngstan 512mb . 38° Sandak 512mb . 50° Apacer 512mb . 38° Lexar 100x1gb . 119° ngstan 1gb HS . 65° Sandak 512mb 12 64° Apacer 1gb secure 59° Lexar 120x2gb . 179° ngstan 4gb HS . 228° Sandak 1024mb . 127° Sandak 1gb 76m . 79° OCZ Rally 512mb . 39° ngstan 4gb HS . 228° Sandak 1024mb . 127° Sandak 1gb 76m . 79° OCZ Rally 1gb . 53° Sandak 1gb Rest . 118° OCZ Rally 1gb . 102° CZ Rally 1gb .

EXTERNAL HARD DRIVES

-Tech's premium external desktop hard drives feature both Firewire an USB 2.0 interfaces for PC and MAC use. The compact, high quality aluminum design radiates heat quickly and makes these units suitable for portable use. Silent operation. They are stackable and can be daisy chained using the IN/OUT Firewire ports. Interface cables and power adapter



Custom quotations available

· Corporate purchase orders welcome · All products come with full warranty · Prices already cash discounted... credit cards subject to surcharge

Prices subject to change without notice

209%

·We ship across Canada ·Order online www greytech com

Rackmount File Servers

From\$469





- Intel Pentium 4 3Ghz processor - Asus motherboard with onboard video - 512mb DDR memory - 40gb Seagate hard drive - Liteon CD-ROM drive - Antec 2U Seagate hard drive – Liteon (D-RIOM rever – Antec 20 or 40 rack out chassis – Heavy duty power supply – ONboard LAN, USB 2.0, Video controller – Built-in RID 1.70 controller for future separation 2 us Server (#CD50255) 510 – esparation 5724.95 4 us Server (#CD50954) 6 pt. 5749.95 6 pt. 6

Genuine iNTEL 1U Rackmount

wintel Pentium 4 3.0Ghz processorwintel motherboard = 1024mb DDR dual channel memory = 160gb Seagate SATA hard drive = CD-ROM drive = Floppy disk drive = Built-in RAID 1/0 controller for future expansion = Intel 1U rack mount chassis = 250 watt heavy duty power supply 1u Server (#GT-SYSQ57629)\$1219.00

INKJET PRINTERS

Enson CD/DVD/Photo Printer



-5760x1440 photo printing •Upto 15ppm in colou - Windows & /

\$12495

	EPSON Inkjets
	R320 Photo/DVD/CD Printer 21795
	R340 Photo/DVD/CD Printer 22595
1	R800 Photo/DVD/CD Printer 45495
1	R1800 Photo/DVD/CD Printer 63595
	R2400 Photo/DVD/CD Printer 9689
1	4800 Print Engine 231495

HEWLETT PACKARD All-In-One 1510PSC Print/Scan/Copy

4215MFP Print/Scan/Copy/Fax 13495 6210MFP Print/Scan/Copy/Fax . 29195

SCANNERS FUIITSU Document

Storage System Scans directly to PDF and JPEG formats

and JPEG to

Adobe Acrobat 7.0
Standard included

50 Page Feeder
Upto 15 pagesimin

USB 20 interface
Upto 85 x 14

Business Cards

Full Duplex



FPSON 3490 Photo 3200X6400 12895 3590 Photo 3600x6400 motorized ... 15295 4490 Photo 4800X9600 30295 4990 Photo 4800x9600 54795 4990 Photo Pro 4800x9600

Fuiltsu DOCUMENT STORAGE SYSTEM Automatically scan documents and photos and digitally store your important records. Includes Adobe Acrobat 7 and Abbyy OCR to Word, Excel or Powerpoint convertor 559%

MEDIA PLAYERS

Creative	Nano Plus 256mb	78%
Creative	Nano Plus 512mb	9495
	Nano Plus 1024mb	
Creative	Zen Micro Photo with 8gb	drive. Plays
music files an	display colour photos	27395
Creative	Vision:M Media Center wil	th 30GB hard
drive. Plays m	usic.full length movies, reco	rds voice. FM
radio Stunnin	g 2.5" 65k LCD display.	34895

Our 17th Year

550 Alden Rd., Unit #110 Markham, Ontario L3R 6A8 Telephone: (905) 470-1425 www.greytech.com

GREY

Directions & Hours

5 Lights North of Steeles Avenue 1 Block West of Warden Avenue Hours: Monday - Friday: 9am - 6pm Saturday & Sundays: Closed June 1st and 2nd: Closed

PROCESSORS

Control of the Contro
INTEL PENTIUM 4 LGA Retail
2.80Ghz (533Mhz, 1mb, P4-511) 10895
3.00Ghz (64-bit, 2mb, P4-630) 23295
3.20Ghz (64-bit, 2mb, P4-640) 28395
3.40Ghz (64-bit, 2mb, P4-650) 34995
INTEL PENTIUM 4 Dual Core Retail
2.66Ghz (533Mhz, 2mb, P4-805) 17595
2.80Ghz (800Mhz, 4mb, P4-920) 26395
2.80Ghz (800Mhz, 2mb, P4-820) 26495
3.00Ghz (800Mhz, 4mb; P4-930) 26495
3.20Ghz (800Mhz, 4mb, P4-940) 31395
3.20Ghz (800Mhz, 2mb, P4-840) 44395
3.40Ghz (800Mhz, 4mb, P4-950) 40095
AMD ATHLON 64 Retail
3500+Socket 939 (Venice 333Mhz) 24995
AMD ATHLON 64 Dual Core Retail
3800+X2 (512kb+512kb) 35595
4200+X2 (512kb+512kb) 43195

MOTHERBOARDS

FOR INTEL PROCESSOR	
Asus P5S800-VM sis wivid	eo 759
Giga. GA8S661FXM-7 sis w	ivideo 719
Asus P5RD2-VM X200 w/vide	989
Giga. GA-81915G-MF 915G.	1279
Asus P5GD1-VM 915G w/vic	
Asus P5PL2 945PL	
Asus P5LD2-VM 945G w/vid	
Asus P5LD2 945P	
Asus P5ND2-SLI NForce4 24	
Asus P5N32-SLI-DX NF4	
Asus P5WDG2-W 975X	3979
FOR AMD PROCESSORS	
Asus A8V KT8	
Asus A8N-E NForce4	1209
Asus A8N-SLI NForce4	
Asus A8N-SLI-DX NForce4 .	
Asus A8N-SLI-Prem NForce	
Asus A8N32-SLI-DX NFord	e4 235
HAPD DRIV	EG

HARD DRIVES

SEAGATE EIDE (PATA)

	40GB (ST3402111A) 2mb 5years	. 5/00
ı	80GB (ST380011A) 2mb 5years	. 6695
	120GB (ST3120814A) 8mb 5years	. 9195
	160GB (ST3160812A) 8mb 5years	. 9595
	200GB (ST3200826A) 8mb 5years	10495
	250GB (ST3250823A) 8mb 5years	11395
	100GB Notebook Drive 5,400rpm	17095
	SEAGATE SERIAL (SATA)	
	80GB (ST3808110AS)8mb SA TA	6995
	120GB (ST3120813AS)8mb SA TA	96%
	160GB (ST3160812AS)8mb SA TA	10095
	200GB (ST3200827AS)8mb SA TA	10995
	250GB (ST3250824AS)8mb SA TA	11995
	300GB (ST3300622AS) 16mb SA TA	1749
	400GB (ST3400633AS) 16mb SA TA	2679
	500GB (ST3500641AS) 16mb SA TA	3679

CASES

GREY-TECH	
GT-5130 (450 watts, USB, Beige)	388
GT-A602-BK (no power, 12cm fan)	
ANTEC	
SONATA II (450 watts, USB)	1379
SLK3000B (no power, USB)	639
SLK1650/B (350 watts, USB)	
P150 Quiet Case (HE 430 watts)	1819
P180 Extreme Case (no power)	1659
See ALL our cases at www.greytech.	com

Shop online at www.greytech.com

OPTICAL DRIVES

OF HOAL DINIVE	•
CD-ROMS	
Liteon 52x	198
DVD-ROMS	
Liteon DVD 16X	. 272
CDWRITERS	
Liteon (SOHR5239S-BK) 52x32x52 .	2995
DVDWRITERS	
Pioneer (DVR-111) 16x+/16x-/8x DL	529
Pioneer(DVR-111E) External Kit	1349
(Firewire/USB2 enclosure, Drive, Nero	
Plextor (PX-740A) 16x+/16x-/8xDL	1169
Plextor (PX-716SATA) 16x+8x	156%
LG (H10) 16x +/16x - DL	
Liteon (160P6S) 16x+16x-DL	
Asus (1608P) 16x + 16x - DL	
	_

DVD DUPLICATORS

Push a button and make up to nine copies of a DVD or CD. Simple to use. Self Contained. Easy to read LCD Display. Designed for continuous operation.

3 Target unit (#GT-DVDQ58555) 58985 5 Target unit (#GT-DVDQ57097) 68995 7 Target unit (#GT-DVDQ56516) 79096 9 Target unit (#GT-DVDQ56517) 10099 11 Target unit (#GT-DVDQ59198) 118995

VIDEO CARDS ASUS

ASUS	
X1300 128 ^{MB} , DVI, PCIE	8395
X1600PRO 256MB, DVI, PCIE 1	5095
X1600PRO 512M9, DVI, PCIE 1	5595
6600GT 128 ^{MB} , DVI, PCIE	0095
X1600XT 256MB, DVI, PCIE 2	2095
7000CT 256-, DVI, PCIE	7405
7900GT 256 ^{MB} , 2xDVI,PCIE	77~
X1900GT 256 ^{MB} , DVI, PCIE 4	5900
7900GTX 512MI, 2xDVI, PCIE 6	1000
X1900XT 512MB, 2xDVI, PCIE 5	989
X1900CF 512MD, 2xDVI, PCIE 6	7295
ATI	
AIW X1300MCE 256 DVI, PCIE 2	7495
X800XL 25648, DVI, PCIE	1 995
AIW X1800XL 25648 DVI, PCIE 4	14 985
AIW X1900 256 N DVI, PCIE	3595
SAPPHIRE	000
	7.00
X550 128MB/256MB, DVI, PCIE 6500	2400
X1300 256MB, DVI, PCIE	9700
X1600 Pro 25648, DVI, PCIE	13300
X1600 Pro 512MS, DVI, PCIE	159 ^{cc}
X1600XT 256MB, DVI, PCIE	
X800GTO2 256 ^{MB} , 2xDVI, PCIE, Vid	eoin
and Video Out capabilities	20500
X1900XT 512 ^{MS} , 2xDVI, PCIE	52985
REC	

6800 Extreme 256^{sea}, DVI, PCIE 167⁰⁰ 6800 Extreme OC 256^{sea}, DVI, PCIE 173⁰⁰ TV THNED/CARTHE

7300GS 256¹⁶³, DVI, PCIE 7600GToc 256¹⁶³, DVI, PCIE 7800GToc 256¹⁶³, DVI, PCIE ... XFX

IN TUNERCAFIO	L
HAUPPAUGE	-
150mce for Windows Media Center Ed	Man
TV/Capture win REMOTE	50%
TUL Theatra 550 for Windows Media Center	99 ^m
Pinnacle Studio 500 Studio 10, Frenze	78 ¹⁶

POWER SUPPLIES

Generic ATX 400 watts, CSA 2498
Sparkle All-In-One 350 wats, CSA: 3495
Enermax NoiseTaker 420 watts 8010
ACE All-In-One 520 watts, CSA 6898
ANTEC TruePower 550 walts . 10515

LCD MONITORS



New Moss.

Model LG-L179TX \$29295

25

VIEWSONIC	
17" VA702B 12ms 550:1 Analog .	. 243
17" VA712B 8ms 350:1 Digital	. 268
17" VX724 3ms 550:1 Digital	. 361
17" VP720B 4ms 500:1 Digital	. 292
17" VP730B 8ms 500:1 Digital	. 319
19" VA902B 8ms 550:1 Analog	. 307
19" VA912B 8ms 800:1 Digital	. 320
19" VX924 3ms 550:1 Digital	
19" VX922 2ms 550:1 Digital	. 384
19" VA1912WB 8ms Wide Digit	
19" VP920B 4ms 500:1, Digital	
19" VP930B 8ms 1000:1, Digital	
20" VP2030B 8ms 1000:1 Digital	. 567
21" VP2130B 8ms 1000:1 Digital-	. 775
23" VP2330WB Wide 1920x1200	
SAMSUNG	1000
17" 740N 8ms 600:1 Analog	245
19" 913V 12ms 600:1 Analog	

ACFR

17" AL 1706B 12ms 500:1 Analog ... 238 19" AL 1916B 12ms 500:1 Analog . 27516 19" AL1951C 4ms 700:1 Digital ... 424% 20" AL2032WA 8ms Wide Digital 51498 20" AL2016W 8ms Wide Analog . 41998 24" AL2416WD Wide 1920x1200 111498

DVD / CD MEDIA



Save on DVD and CD media when you purchase in quanity

ProDice DVD Media

Regular White Face 100 am 38" Glossy Photo White Face . 50 am \$174

DVD/JEWEL CASES

	Pack of 50. 11110, 100. 12210, 200. 1401	20
	Jewel Case Single Acrylic (Silms)	210
	Pack of 50. 1810, 100. 11600, 200. 12810	
	Jewel Case Double Acrylic	394
ı	Pack of 50 \$1450, 100 \$2670, 200 \$48	10
Į	DVD Case SINGLE Slim Vinyl	390
	Pack of 50. \$1210, 100. \$2110, 200. \$38	700
	DVD Case SINGLE Vinyl	390
	Pack of 50. 120 100. 121 200. 138	100
	DVD Case DOLELEVIN	394

Packof50...\$12¹⁰,100...\$21³⁰,200...\$38³⁰

LCD TELEVISIONS

ViewSonic N3260W 32" Monitor/Digital Television



- 32" Wide-Screen LCD high Intense colour, high contrast 800:1, Grade 'A' Glass
 True 1366x768 resolution - 720a/1080; supported

Garning compatible 8ms computer mode
 Picture in Picture support, Built in tuner, HDMI

DNX Image Processing \$12995

VIEWSONIC N2050W 20 625% VIEWSONIC N3260W 32 VIEWSONIC N3760W 37 1917% VIEWSONIC N4060W 4th 720b/1080V1280x768HDMI 22798

DVD RECORDERS

Make you own DVD's from sources: VCR's, Camporders, Etc.



Liteon LVW-5005XS set top DVD

NETWORKING

WIRELESSNETWORKING

	Dlink Wreless Router DI-524 (g)	. 61 ^{to}
	Dlink Wreless Router DI-824 (g)	77%
	Dlink Windess Access Point DMC-21004P (c)	10985
	Dlink Vireless Media Player DSM-320 (c)	174%
	Dlink Wreless PCI Card DNL-G810 (p)	. 56 ⁹⁵
	Dlink Wireless PCI Card DNL-G520 (g)	60°
	Dlink Wireless PCCard DWL-G600 (s)	. 56°S
	Dlink Wireless PCCard DWL-G850 (e)	. 60 ¹⁶
	Dlink Wireless USB Pon DWL-G122 (s)	5400
	Belkin Wireless Router F5D7230-4 (g)	. 50 ⁸⁸
	Linksys Wreess Router WRT54GC (b)	
	Linksys Wireless Router WRT54GS to	9418
	Linksys Weless Kr WKPC54G (g) for re	
	with 802 Tig studer and laptop card	10418
	Linksys Meda Center Extender MMCES	
	Extends MCE 2005 to another your	
	ROUTERS	
	Dlink Rouser 4-port DI-604	46 ⁹⁸
ä	Dlink Router 4-pan wiLPT DI-704P	. 78%
ı		
	Dlink Roder Love Dombia Plat JSTiffee	Ages
ı	Dlink Router 4-port Portable DWL-G730ap	
	Dlink Router 4-port Portable DWL-GTX0sp ADAPTERS	69 ¹⁶
	Dlink Router 4-poit Portable DWL-GTSDs; ADAPTERS Dlink 10100 NIC DFE-539-TX (PC)	69 ¹⁶
	Dlink Router 4 pon Portable DWL-GT30s; ADAPTERS Dlink 10/100 NIC DFE-508-TX (PC) Dlink 10/100 NIC DSE-508T (PC)	69 ⁸⁶
	Dlink Router Apon Portable DML-6770bg ADAPTERS Dlink stores with DFE-508-TX (PC) Dlink stores with DSE-508-TX (PC) PCMCIA/CARDBUS	12 ^{sh}
	Dilink Router 4 poin Portable DWL-6730a; ADAPTERS Dilink stonds with DSE-568 TX (PCI)	12 ^{sh}
	Dink State 4 per Propile DWL GTODS ADAPTERS Dink stress wit DFE stat 17 PC) Dink stress wit DEE stat 17 PC) PCMCIAL CARDBUS Dink stress wit DFE status (Cardon) HUBS & SWITCHES	. 12 ^{ss} . 30 ^{ss} . 43 ^{ss}
	Dlink States 4,500 Portable DWL-G735a; ADAPTERS Dlink storate wid DFE 508-TX (PCI) Dlink storate wid DGE 5007 PCI) PCMCLACARDBUS Dlink storate wid DFE 5000 (Cardeas) HUBS & SWITCHES Dlink storate Storate DGS-10550 Dlink storate Storate DGS-10550	. 69 ⁸⁶ . 12 ⁸⁶ . 30 ⁸⁶ . 43 ⁸⁶ . 56 ⁸⁶
	Dlink Stater 4,000 Portable DWL-GD30g ADAPTERS Dlink states wit DGS-500T (PC) PCMCIA/CARDBUS Dlink states wit DGS-500T (PC) PCMCIA/CARDBUS Dlink states with DGS-500T (Cardbus) HUBS & SWITCHES Dlink states 5-part toleroot DGS-1080D Dlink states 5-part toleroot DGS-1080D Dlink states 5-part 100700 DGS-5080D	12% 30% 43% 56% 78%
11	DUIN'S Router 4-point Protection DWL GOTOlog ADAPTERS DUIN'S 10-role NIC DEE-508-TX (PCI) DUIN'S 10-role NIC DWE-508-TX (PCI) PCMCLACARDBUS DUIN'S 10-role NIC DWE-508-TX (PCI) HUBS & SWITCHES DUIN'S 3-sees 5-point 100 1008-1008D DUIN'S 3-sees 6-point 100 1008-1008B DUIN'S 3-point 100 1008-1008B DU	. 69 ⁸⁸ . 30 ⁸⁸ . 43 ⁸⁸ . 56 ⁸⁸ . 78 ⁸⁸ . 42 ⁹⁸
	Dünk Stater 4,000 Fürüble DWI-GTÜBE ADAPTERS Dink states wit DES 500 FPCI) PCMCLALCARDBUS Dink states wit DES 500 FPCI) PCMCLALCARDBUS Dink states with CHES Dink states 5,000 100 FEST 100 D Dink states 5,000 100 FEST 100 D Dink states 5,000 100 DSS 100 DINK States 100 DSS 100 DINK States 100 DSS 100 D	12 ¹⁶ 30 ¹⁶ 43 ⁸⁶ 56 ¹⁶ 78 ¹⁶ 42 ¹⁶ 78 ¹⁶
	Dünk Roder 4,000 Fordise DWL-G730s; ADAPTERS Dink strate wit DGE-SOST (PCI) Dink strate wit DGE-SOST (PCI) PCMCIA/CARDBUS Dink strate wit DGE-SOST (PCI) PCMCIA/CARDBUS Dink strate wit CFE-SOST (Carbos) HUBS & SWITCHES Dink sales 5-out 100100 DGS-105D Dink Sales 5-out 100100 DGS-6-0	. 69 ⁸⁸ . 12 ⁸⁶ . 30 ⁸⁶ . 43 ⁸⁸ . 78 ⁸⁸ . 42 ⁸⁸ . 78 ⁸⁸ . 101 ⁸⁸
11	Dlink States 4,000 Forsible DWL-GD30g ADAPTERS Dlink storage and DGS-SSST (PCI) Dlink storage and DGS-SSST (PCI) PCMCIA/CARDBUS Dlink storage and DGS-SSST (PCI) Dlink storage and DGS-SSST (PCI) Dlink storage and DGS-SSST (PCI) Dlink storage and SSSST (PCI)	12 ¹⁶ 30 ¹⁶ 43 ⁸⁶ 56 ¹⁶ 78 ⁸⁶ 42 ⁸⁶ 78 ⁸⁶

274% 510°

start with the DC40. It sports a 4.3-megapixel image sensor, the entire width of which is used to capture high resolution 16:9 video, which makes this \$1,200 option strong competition against non-HD MiniDV video cameras.

Hard Disk JVC Everio G7-MG37

www.ivc.ca

Its 0.68-megapixel image sensor isn't anuthing to write home about, but JVC's 30GB hard disk camcorder, which goes for about \$1,200, makes video recording as simple as taking a still picture. Plus, it weighs in at just 400



WWW.FJCOMPUTERS.COM

505 Hood Rd. Unit 13 Markham ON L3R 5V6

Tel: 905-415-1277 Fax: 905-415-1288 Store Hours: Mon-Fri 11:00am-7:00pm

E-Mail: SALES@FJCOMPUTERS.COM Sat 11:00am-4:00pm (Closed Sundays)

Customer Appreciation Days - May 5 & 6 ONLY \$4,000 value FREE GIFTs, Total 300 Gifts, No Purchase Regulred May 5 2006: Fulifilm Premium Plus High Glossy Photo paper (4X6) 20 Pak (\$10 Value)

May 6 2006: Scotch-Brite Super-Cling Starter Pack (\$20 Value)

Limit One per customer / householder, while quantities last

P4 Celeron D2.8GHz/533 \$288 Intel P4 506 2.66G 1M \$369

ACUE DEVICES MY ME Maxter 100G 7200RPM 8M HDD PAM 256MB DDR 400 Module 1G 52X32X52 CD-RW und Blaster Compatible ob Realtek 10/100 networking ob Front USB 2.0 ATX Midtower Case/400W WIN Keyboard & Optical Mouse 120(180W) 3D Stereo SPK

ACUE DEVISOR MY MD or 100G 7200RPM 8M HDD RAM SIZMB DDR 400 Module LG 16XDVD+/-/R/RW nd Blaster Compat altek 10/100 networking ob Front USB 2.0 ATX Midtower Case/400W WIN Keyboard & Optical Mouse 120(180W) 3D Stereo SPK

GAMER P4 630 3.0 2M/775 \$499 GAMER P4 640 3.2 2M/775 \$569

ASUS PSVDI-X USB2.0 ASUS PSVDI-A USBZO
ATI Radeon 9250 126MB DDR TV/DVI
Maxior 160G 7200RPM ATA 133 HDD
Major 512MB DDR 400 Module LG 16XDVD+/-R/RW Dual Layer Sound Blaster 6 Channel Comp. nitek 10/100 networking ob nt USB 2.0 ATX Midtower (WIN Keyboard & Optical Mouse 600W 3D Subwooter SPK

AMD SP 2800+754

AMD SP 2800+ 64bit CPU Maxtor 100G 7200RPM 8M HDD Peal 2565 64M Video ob LG 52X32X52 CD-RW Sound Blaster Compa Realtek 10/100 networking ob Front USB 2.0 ATX Midtower (ver Case/400W WIN Keyboard & Optical Mouse 120(180W) 3D Stereo SPK

AMD GAMER 64 3200+ AMD GAMER 64 3500+ \$289

ASUS K8V-MX 8XAGP USB2.0 MB ATI Radeon 9250 128MB DDR TV/DVI Maxtor 200G 7200RPM ATA 133 HDD Major 512MB DDR 400 Module LG 16XDVD+/-R/RW Dual Laver Sound Blaster 6 Channel Compatible ob Realtek 10/100 networking ob Front USB 2.0 ATX Midtower Case/400W er Case/400W WIN Keyboard & Optical Mouse 600W 3D Subwoofer SPK

CANON IP 4200

Photo Printer 9600x2400 dpi 2 Side Printing



CANON

networking 2.5-inch LCD

(hp) PhotoSmart 8450

Photo Printer 4800x4800 dpi

4 Card Slot & PictBridge

CANON PowerShot A520

\$195 Only!

4.1 Megapixel CCD

4xOptical/3.2x Digital

MP780

CANON MP450 All-In-One Photo Printer

Scanner/ Copier LCD Preview 5188

1840C

MP500 **\$25**

S88 Only

CANON PowerShot A410

4.1 Megapixel CCD

1.8-inch LCD

4xOptical/3.2x Digital

brother

Inkiet FAX

Brother 1840C

8MB Memory

PSC 2355 All-In-One Photo Printer

Scanner/ Copier /LCD

HP PSC 1610 \$119 Only

SCX-4100

All-In-One

Flathed

Laser

Printer

(hp) PhotoSmart 2610

All-In-One Printer Scanner/ Copier/ Fax **LCD Preview** networking

SAMSUNG Digimax A7

7.0 Megapixel

2.0-inch LCD

Zoom

3xOptical/5x Digital

\$199 Only!

5249 Only

1916A

PhotoSmart 3210 World's fastest All-In-One Photo Printer Scanner/ Copier 4800x4800 dpi 2.5-inch LCD

\$269 Only!

PhotoSmart M417

5.2 Megapixel 3xOptical/4x Digital Zoom 1.8-inch LCD

\$135 Only!

Panasonic Cordless Phone NETGEAR WGTB511T

Zoom

1.8-inch LCD

2.4G Expandable Digital Sound System w/ Caller ID Answering System 27705 \$90 GMLY? 2720S \$78 ONLY!

5240 \$99 ONLY!

108Mbps Wireless Router and PCMCIA Card Kit 54Mbps Wireless

TOP Quality CD&DVDs Media

\$ \$135 Only

PLAYO EXDVD+/-R 50Pak Prof. Grade (Limit of one per MEMOREX 16XDVD+/-R 4.TG IMATION EX DVD +/-R 4.7G 100Pak\$25.9

and \$139 Only!

Margor Ultra IDE HDD 60G 7200RPM Retail Box \$4*9°° Only!*

100G SATA 7200RPM EM Retail Box \$64°° Only! 120G 7200RPM 8M Retail Box 569° Only!

PNY FLASH MEMORY

512MB USB 2.0 \$29.99

SanDisk Cruzer Micro

w/skins USB 2.0 \$35.99

512MB Flash Drive

One bad pixel replacement quaranteed! 19" LCD/700:1/8ms/ 1280x1024 DVI \$259 only! <

Antec Notebook Cooler

Aluminum Case **USB Power**



All prices are already 4% cash discounted. Other forms of payment will be at regular prices. Prices and availability subject to change without notice

grams - less than a pound, A 2.2-megapixel model, the GZ-MG77, is also available for around \$200 more.

Sonu DCR-SR100 Handucam

www.sonustyle.ca

For only \$100 more than the GZ-MG37 you can buy Sony's first hard disk camcorder, which has an image sensor twice the width of the GZ-MG37 and is capable of capturing much more detailed moving pictures. It packs a 30GB hard drive too, and is slated to start shipping in Canada this month.

By Chad Sapieha







Celebrating Sonaggi's 1year Anniversary! You could win these PRIZES!

GRAND PRIZE

DayTek42" PDP TV 1 Winner



Second Prize Samsung 19" TFT LCD Monitor



Third Prize Samsung MP3 Player 1GB 2 Winner



Fourth Prize Logitech X-230 Speakers 2.1 Silvenor

> Free Parking at rear

www.SOnaggi.com 416-850-9742 5323 Yonge St.



LG P1-P200A9

T2500 2.0Ghz, 80G, 1GB, 15 ATWYGA DVD+-RW XPP. ATIX 1600

2179 99



4202 WLMI

LG K1-2225A8 Centrino M740 1.73Ghz. 512MD ence DVD+RW

1039 99



ACER - AS 3623 WXMI-LINUX

CELERON 1.5Ghz. 40GB 256MB DVD+RW 14 1700004

589 aq



DUO 1.66Ghz, 80GB, 512MB.

XPH. DVD+-RW. 15.4"WXGA AS5502 ZWXCMI



107999



ASUS W5F

512M/100GB 12.1 WXGA DVD+RW XP HOME

WSF DUAL CORE 1.6Ghz ASUS AS3000E

CENTRING 1 TECHY 512MR 8008 15.0XG4 DND, CD R

889 99



SAMSUNG 740N

s224 99



889 99

LG



AL17168 s17499











DATAWARE

s11 99





HARD DRIVE 554 c







Notebook Service

We Repair all Makes, and model Notebooks, Guaranteed Service





17" CRT MONITOR



Pentium 3

Powerful package from Adobe

Is production studio too "Suite?"

It may be a case of too much, or too soon.

Make no mistake, the latest Creative Suite offering from Adobe Sustems is a powerful package for professional videographers and media creators.

Unless your requirements for a fully-featured digital video production toolbox are immediate, comprehensive and on-going, this new package will have features you'll never want. But if you regularly create professional media content - for video, HD, DVD, web or print - this package might have everuthing you'll ever need.

It combines many of the company's most successful and most popular media creation and production tools into one - actually two - new Production Studio bundles. Tools for video editing, DVD authoring, audio composing, photo manipulation, graphic creation and much more are tightlu integrated into the new package.

One cannot argue with the comprehensive capabilities built into the software, but one can question whether the total cost - hardware, software, time and money - are worth it in every situation. The latest Production Studio (V2) was just recently released, but already there is talk of Version Three: the rumour mill has it coming out within a year, and in a Mac version. as well. As it stands now, it's available as either Standard or Premium version for Windows XP only

It comes on five DVDs, some 20GB all told, with almost 10GB of media (including roualty-free materials). Two hours of training material is included

with the package.

It requires a minimum 1.5GHz Pentium 4 (more horsepower for high definition work is needed 1, 1GB of RAM or more; a 7200 rpm hard drive (or RAID 0 array) and an officially supported high end video capture card.

So, the total investment may be a small fortune for some video editors, but there is a treasure chest waiting. Production Studio is greater than the sum

It now fully and natively supports HDV (high definition video), and it can handle other video formats with dimensions up to 4096 x 4096 pixels. It can now do sunchronous multi-camera editing. There are incredible pixel-based slo-mo video capabilities. Complex dual layer DVDs can be built. Audio can be recorded, mixed and processed. Vector-based graphics, for any application or resolution, can be created.

It does all this in a newly unified and integrated user interface, one that is fully customizable. All apps now share a dockable, scalable workspace make one window larger, and the adjacent one gets smaller, automatically. There are no more separate palettes cluttering up the screen; each can be docked and sized according to need.

Not only the look and feel of the interface, but the actual functionality is more closely integrated in this package. For example, new and yery handy is the ability to capture footage using Premiere Pro from within After Effects no more switching in and out of programs.

Adobe's new Bridge feature acts as a file browser that can be launched

TRO SU

Steeles Ave. West, Unit 4. Thornhill, (West of Yonge St. - Tous "R" US Plaza)



17" / 19" LCD

370-1849



New PC System

PC Tune Up 520

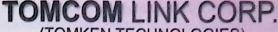
LG DVD RW \$ Coolsat 5000/6000 *195/22! Satellite Receivers

starting from www.esprice.

For daily updates from the fast moving world of technology visit www.hubcanada.com

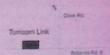






(TOMKEN TECHNOLOGIES) 1353 Britannia Road East, Mississauga ON L4W 1C7 Tel: (905) 565-939 Fax: (905) 565-6386

Toll Free: 1-866-625-9889 http://www.tomcom.ca E-mail: info@tomcom.ca DEALERS ONLY



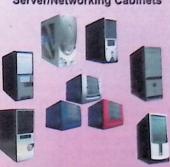


We now provide technical and financial services

Networking Wire / Wireless



Computer cases Server/Networking Cabinets



Computer &

Home theater

Input Devices PS2/USB/Cordless Mouse/Keyboard/Write Board

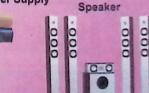


Notebooks

Surveillance



Power Back-UP/ **Power Supply**



Ext. Enclosure 2.5" / 3.5" / 5.25"

Used Systems / Monitors





CD/DVD Duplicator Media & Storage



MP3 with FM Radio&Rec. MP4 Player **Digital Memory**





RC Remote Toy Car

h a purchase of more than \$1000.00 in one sale order, you w









































ELITEGROUP



independently or accessed from any component, and can be used to locate any media asset on the system. Drag-and-drop functionality [from Adobe's Dynamic Link) means you can move After Effects compositions directly into Premiere Pro and Encore DVD, without having to render them first. Changes are automatically updated.

Each of the stand-alone programs now bundled in the Production Studio have their own new features and enhancements. Premiere Pro 2.0, the video editing program, works in real-time with HD, HDV, SD, DV, or film resolutions.

Now, I happen to think one of the coolest additions to the program is something called ClipNotes, a great new way to share, comment on and revise video. Taking a video segment right off the Premiere Pro timeline, ClipNotes turns it into a password-protected, Acrobat-like portable document for comment and review.

The video, either QuickTime or Windows Media format, comes in one of three user selectable presents (to control quality and size). The video

can be embedded in an actual PDF or transferred via ftp, or even streamed from a created web page so that others can watch it, comment on it and attach notes about it to the video clip itself.

video is returned, any added comments appear right on the editing timeline. as embedded markers. Although the files created are still pretty large -Adobe should work on reducing the overall size without losing any features - this is a very handy tool for client comments, visitor feedback or production team communications.

There are real business reasons for such a tool now, but I think there will be creative, consumer oriented reasons for its wider use in the future.

Encore DVD 2.0 now has an easy slideshow creation tool, with transitions and pan and zoom effects built-in. Video can be exported right off the Premiere timeline, with makers, for DVD creation. New menu linking and media assets management tools make creating more sophisticated DVDs almost as easy.

In Photoshop CS2, a great new Vanishing Point tool has been added that lets you clone, paint, and paste new visual elements that automatically match the perspective of the surrounding image area. Image Warp is very cool - it automatically wraps or warps an image around any shape. stretching, curling or bending it to fit. Regardless of the tool you use in Photoshop, opening compositions - including those with layers - is a streamlined and updated process within Photoshop, After Effects, Premiere Pro and Encore DVD.

After Effects 7.0 has an improved Graph Editor, that offers complete visual control over keyframe editing on the timeline, allowing for easy synchronization of animated properties, including text, effects, transitions and back-ground movies.

Audition 2.0, the audio editing and restoration package, works with live Once that annotated recordings, imported files or any of the thousands of included royalty-free

Computer Canada. Net

TEL: (905)479-3992 FAX: (905)479-1093

* Free Shipping For Order Over \$500! * **Guarantee To Beat Any Price On The Market!** Best Quality Products + 1 Year Warranty!

* Free Shipping Apply To CCTV Products Only *

825 Denison St., Unit 10, Markham, ON, L3R 5E4

For More Info, Visit Us At:

WWW.COMPUTERCANADA.NET



FCK11 **D&N Waterproof** 1/4" SONY CCD 420TV Lines 6MM Lens



0066 **D&N Waterproof** 1/3" SONY CCD 420TV Lines

3.6MM Lens



FCK276IR Day & Night 1/3" Sony CCD 420TV Lines 3.6MM Lens



CV662 **D&N Vandal & Water Proof** 1/4" Sony Super HAD CCD 420TV Lines / 0 Lux 4 - 9MM Varifocal Lens





P/T/Z Control Box Up to 64 Cameras LCD Display Easy-touch keypad NQJ301







Video Balun Signal Transmitters





music loops. Clean ups, noise reduction, dialog replacement, hum, click and pop removal and more can be applied to imported AVI, QuickTime or MPEG files. Audio can now be exported as AVI, MPEG, DV, or WMV.

Illustrator CS2 (included in the Production Studio Premium version only) helps create layered, scalable graphics, text and animation no matter how large or small the format's requirement. Newly enhanced painting, drawing and type tools available, including

Live Trace, used to quickly and easily convert video frames or photos to editable and scalable vector paths.

Describing the full power and sophistication of the new Adobe Production

Studio is not quick or easy, I'm afraid. There's just so much to this program that its strength is in some way its weakness.

Unless you have a real need for the complete package, and the full power it contains, you would do better looking elsewhere. Adobe does offer consumer-level, scaled back versions of its video editing and photo manipulation tools (Premiere and Photoshop Elements, respectively).

Those programs cost less than \$200 each; the full Production Studio Premium package is over \$2,000. Somewhere in between, and Adobe might find the real "suite" spot.

By Lee Rickwood

Your Canadian Source for Best Prices on Computer Parts and Accessories - Since 1992

Z93E • Notebook • Z83V

- Infel 915GM ("Alviso-GM") / ICH6-M
 Infel Penflum M with 533MHz or 400MHz FS3
 512M DDR333 (expandable to 2 GB)
 Infel 915GM graphics controller
- Intel 915GM graphics controller
 15.4* WXGA (1280X800) Display
- DVD/CDRW Combo Drive
 Toshiba 40G 5400rpm HD
- V.90/56K Fax / Mode
- 10/100 BaseT Ethernet
- Wireless A/B/G Network
 6.5lbs w/battery



M750

0 SIII8

M740 \$1562

M750 \$1610

Intel Pentlum M with 533MHz or 400MHz F58

•512M DDR2 533 (expandable to 2G8)

•ATI Radeon X700 graphics processor 128MB •17.0" WXGA ASUS Color Shine LCD

M760 5101

Intel · Value Barebone · AMD

- *FOXCONN 661FX7MI SIS661FX chipset
- Maxtor 80G8 IDE 7200rpm Hard Drive SIS high-performance graphics wiAG
 PIONEER 110 16X DVD+/-RW Drive
- •10/100Mbps Fast Ethernet
- D341J 830



*PC Chips M671G SIS760GX/964 chipset *Kingston 256MB DDR 400MHz PC3200 Kingsten 256MS DDR 400
 Sony 1.44M Floppy Drive

- ONEER 110 16X DVD+I-RW Drive
- *Realtek 10/100Mbps Fast Ethernet
- *400IN Power Supply (Optional: Operating System, KB, Mouse & Monitor)

S992 51125

M370J



M740

\$250 Part #4797

ML-1610 Laser Printer 600dpi resolution
 17 ppm print speed
 150 sheets input,
 50 sheets output

· Alviso 915 PM & ICH6-M

· 8x DVD+/- RW Drive

•10/100/1000 BaseT Ethernel

· Wireless A/B/G Network

•4-In-1 Card Reader •Built-In 1.3Mpix Camera

AMBUNE

·s 67

LEXMARK C510 Colour Laser 2400dpi resolution
 30/8 ppm monalaciour speed
 PostSoriat emulation standard

\$ 209

P4-2.0GHz Desidop *Intel Pentium 4 2.0GHz *256MS Memory *40GB Hord Drive *DVD-ROM



Æi ALL-IN-WONDER 9800 •128MB •AGP

\$100

/ISLIS ABR32-MVP DELUXE

·All CrossFire Xpress 3200 · Dual PCIe x 16 Graphics Dual Gigabit LAN Part #2346

adaptec

AHA-4000A USB 2.0 PC

USB 2.0 P/CI Host Adopter
 4 x USB 2.0 EHCI-480 Mbps

s 230

F6C900-UNV UPS •540 Watt Capacity •50 Minutes of backup time 6 surge protected outlets,
 4 with baffery backup

s 130

BLUETAKE

I-PHONO Headphone Mini Bluetooth Headphone
 20 Hz - 20 KHz a Ratio 15 dB



KWORLD

Part #4599

PVR-TV 300U TV Box Dongle USB2.0 TV Box *supports 64-bit OS *Real-Time MPEG 4 e MPEG 4/2/1 Encoding

CHIPS PC Chips ChM871G

•With Athlon XP 2800+ CPU •SIS 760GX/964 Chipset •Ultra256 3D Graphics



s 63

\$139

6- Logitech Quickcam for Notebooks

640x480 sensor built-in microphone

No-Logitech X530 5.1 6PCS lites: 45 worts RMS Subwooter: 23 wats RMS

F5D8000 Wireless Card



F5D7233 Wireless G Router

Digital Satellite

Receiver •Formel 1700A-N2 Composible *Auto NESCHAL Con +3000 Chronial Nations

APPLE

IPod Video 30GB •2.5' Colour LCD •Battery Life Up to 14 •Storage 30GB

APPLE

iPod nano 2GB -White Bright color display
 Bothery Life Up to 14 Hours
 27 Inches thin 1.5 ounces



Liberty 400W PS •400 Watt Power Supply •Slant 120mm fon



EG455PVE FMA

WAREHOUSE OUTLET 7310 Woodbine Aver (Woodbine & Denis TEL: (905) 415-0909 FAX: (905) 415-0911



(1500 Dundas St. E (Dixie & Dundas)



Calibrate good times, come on!

Let's calibrate. If you want to join Kool and the Gang as an honourary member, nothing will make you more eligible than learning a little about how to calibrate your home theatre display. Okay, maybe you'll become somewhat cooler but probably not "Kool" enough. Who wants to be in a gang anyway? Still, it's nice to be able to optimize your display in order to extract the maximum value from it.

Displays for video are calibrated using test patterns that you may have noticed on TV channels after their broadcast day. To me, it's often the best thing on.

The most common test pattern is SMPTE colour bars which have bars of various colours on the top two-thirds of the screen with a thin strip of the same colours in reverse order underneath them. Below these bars, there are three boxes on the left half, one of which is white. Left of these is black and three very dark black or grey strips underneath the second to last colour bar. These little vertical strips are called PLUGE.

Take a look at Figure 1. Due to the printing process, this may look different than it should, particularly PLUGE.

Firstly, turn your display on for about 20 minutes before you start

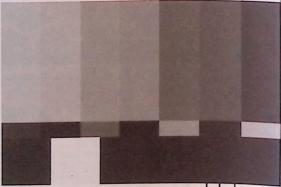
calibrating. Next, find the colour control on your display and turn it all the way down so that you have it in black and white mode. This sets up the display to adjust brightness and contrast which should be called black and white levels respectively, if they were labeled accurately.

[1] To set the black level (brightness) you use the PLUGE where the leftmost vertical strip is not darker than the general black strip (middle) but the far right strip is still visible. You should only see black with one dark greu vertical strip in that whole bottom-right area. Remember, these are the 3 little vertical strips under the second to last colour bar in the bottom right but you should see only one when calibrated.

[2] Next, you need to set the contrast (white level) which is adjusted until the grayscale of the bars in the top two-thirds are in nice even steps from light to dark. Take a look at Figure 2 for an idea of what a properly calibrated display should look like. This assumes its translation to print hasn't mangled it too badly. Anyway, even grayscale steps are what to shoot for.

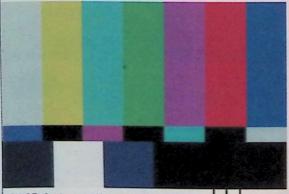
The next set of procedures require you to only look at the blue component

Figure 2



PLUGE - 3 strips - superblack, black and dark grey 1. Adjust brightness (black) level to where superblack=black and dark grey shown

above: adjust contrast (white) until grey bars make even steps from left to right



PLUGE - 3 strips - superblack, black and dark grey-

above: SMPTE bars

Figure 1





PC Village Computers

Welcome to www.pcvonline.com

YORK CENTER 5383 Yonge St. Unit #9 (Yonge/Finch) Tel:416.733.8115 Fax:416.733.9575

North York 2899 Steeles Ave. West Unit #14 (Keele/Steeles) Tel: 416.987,7196 Fax: 416,987,7197

Toronto 2221 Yonge Street (Yonge/Eglinton) Tel: 416.322.2221 Fax: 416.322.0227

Toronto 684 Yonge Street (Yonge/Bloor) Tel: 416.975.9268 Fax: 416.975.0291

Scarborough 4820 Shoppard Ave. East Unit #21 (/McCowan) Tel: 416.335.8887 Fax: 416.335.3200

Markham 3229 Huy7 7E 87 (Hwy77Woodbine) Tel: 905.947, 1918 Fax: 905.947.1921

Richmond Hill 245 W.Boaver Creek R Unit #3 (Lesliellisy7) Tel: 905.889.5408 Fax: 905,009,0653

SUPER SPECIAL

INTEL P4 CELERON D310 CPU P4 MB, 256 MB DDR 80GB 7200RPM HDD 52X32X52 CD-RW 32M AGP VIDEO CARD(SHARED) 32 BIT SOUND CARD, 10/100 NETWORK CARD ATX MID TOWER CASE, 1.44 FLOPPY **KEYBOARD MOUSE** 120W SPEAKERS

WITH SAMSUNG 17" 793DF MONITOR \$399 WITH SAMSUNG 17" 713N (8MS) LCD \$489

BEST DEAL

INTEL P4-288G CPU P4 MB, 256 MB DDR 80GB 7200RPM HDD 52X32X52 CD RW 32M AGP VIDEO CARD(SHARED) 32BIT SOUND CARD, 10/100 NETWORK CARD ATX MID TOWER CASE, 1.44 FLOPPY 104 KEYBOARDMOUSE 120W SPEAKERS

WITH SAMSUNG 17" 793DF MONITOR \$469 WITH SAMSUNG 17" 713N (8MS) LCD \$559

DIAMOND SYSTEM

INTEL P4 630/3.0G CPU/2M CACHE) ASUS PSVD1-X MB, 512M DDR400 200GB 7200RPM HDD, 1,44 FLOPPY DRIVE 16X DVD+I-RW DUAL LAYER ATI RADEON 9250 128M AGP VIDEO CARD 5.1 CHANNEL AUDIO, 10/100 NETWORK CARD 600W SUBWOOFER WITH SPEAKERS MID TOWER WITH 400W POWER SUPPLY KEYBOARD/OPTICAL MOUSE

WITH SAMSUNG 17" 713N (8MS) LCD \$789 WITH SAMSUNG 19" 920N (8MS) LCD \$849

X-GAMER SYSTEM

AMD ATHLON 64X2 DUAL-CORE 3800+ CPU ASUS A8N-E MOTHERBOARD 1GB DDR400 DUAL CHANNEL 250GB 7200RPM HDD, 1.44 FLOPPY 16X DVD+/-RW DUAL LAYER ATI RADEON X1600PRO 512M PCI-EXPRESS 10/100/1000 NETWORK CARD, 7.1 CHANNEL AUDIO ATX MID TOWER WITH 450W POWER SUPPLY 600W SPEAKERS WITH SUBWOOFER LOGITECH KEYBOARD/OPTICAL MOUSE WITH SAMSUNG 17" 713N (8MS) LCD \$1179 WITH SAMSUNG 19" 920N (8MS) LCD \$1239

Monthly Special

SANDISK 1GB USB DRIVE **BUFFALO 512MB DDR400** SAMSUNG 17" 713N(8MS) SILVER LCD SAMSUNG 17" 740N(8MS) BLACK LCD SAMSUNG 19" 920N(BMS) LCD SAMSUNG 19" 940BF(2MS,DIGITAL) LCD SAMSUNG 19" 940B BLACK LCD LG 19" 1952T(8MS, 1400:1) LCD SAMSUNG 80GB HDD 7200RPM SAMSUNG 250GB HDD SAMSUNG 1610 LASER/AFTER STORE) **CANON IP2200 PRINTER**

MAGMA SYSTEM

INTEL D820 DUAL CORE 2 8GHZ CPU ASUS PELDE MB 1GB DDRII 533MHZ DUAL CHANNEL 200GB SATAII HDD. 1.44 FLOPPY 16X DVD+I-RW DUAL LAYER ATI RADEON X550 256M PCI-E VIDEO CARD 7.1 CHANNEL AUDIO, 10/100/1000 NETWORK 600W SPEAKERS WITH SUBWOOFER ATX MID TOWER WITH 450W POWER SUPPLY LOGITECH KEYBOARDIOPTICAL MOUSE WITH SAMSUNG 17" 713N (8MS) LCD \$1079 WITH SAMSUNG 19" 920N (8MS) LCD \$1139

\$10

272

537

228

533

* ALL SYSTEMS WITH FIVE YEARS LABOUR & ONE YEAR PARTS WARRANTY *

ALL PRICE ARE ALREADY 3% CASH DISCOUNTED, PRICE SUBJECT TO CHANGE WITHOUT NOTICE *

822

\$43

3226

\$229

\$285

2289

\$330

\$52

200

255

384

Hard Drive

7200 SERIAL

209

\$125

\$59

\$84

\$105

\$118 \$127

RPM ATA

\$79 \$84

397

5124 \$126

\$57 \$57

\$89 \$93

\$132

\$82

552 594

\$215 \$226

IDE-HOD

MAXTOR

160GB (16M)

200GB (16M)

300GB (16M)

500GB (16M)

BOGB (BM)

160GB (BM)

200GB (8M)

320G8 (BM)

160G8 (BAD

200GB (8M)

250GB (5M)

300GB (8M)

400GB (16M)

500GB (16M)

36GB(10,000RPM)

74GB(10,000RPM) SEAGATE

WD

Video Card

ATI ALL-IN-W 2006ED 256M \$205 543 ATI R9250 128M AGPIDI ATI RISCOPRO 256M AGP(O) \$91 ATI X1300 256M AGPID \$121 ATI X1600 PRO 512M AGP(O) \$169 ASUS V9520-X 128M AGP \$45 \$74 ASUS NEZOO 255M AGP ASUS NEGOCLE 256M AGP ASUS NEEDOGT 128M AGP \$179 ATI A-IN-W X800XL 256MPCIE \$329 ATI A-IN-W X1800XL 256MPCIE ATI A-IN-W X1900 256MPC/E \$517 ATI X550 256MPCIE(0) ATI X1300 256M/PCIE(0) ATI X1600PRO 512MPCIE(O) ATI X800GTO2 256MPCIE(O) \$151 ATI X1900XT 512MPCIE ATI X1900XTX 512MPCIE AGUS EN/200GS 128MPC/E AGUS EN/600GT 128MPC/E AGUS EN/600GT 258MPC/E ASUS EN7900GTX 512MPCIE ASUS MY CINEMA P7131

\$05

584

\$189

Sound Card

AOPEN AWAD \$14 S.B. ALDIGY SE CEM S.B. ALIDIGYZ ZS CEM \$79 S.B. ALDIGY? ZS NOTEBOOK \$100 S.R. X-FI XTREME MUSIC \$135 SB X-FI PLATINUM S.B. X-FI FATALITY S.B. X-FI ELITE PRO

Power Supply



FC351P.VII.FM 350W EG435A-VE-SFNA 430W EG485P-VE-SFWA 485W 5100 ECSSSP-VE-PM-SLI \$35W ELT400AWT LIBERTY 400W 532 ELTSODAWT LIBERTY SDOW ELTERNAMT LIBERTY 620W

Optical Drive

LG SZX CD-ROM SAMSLING YEX DVD LG STROTHED CO. RW AGUS SENDROSE COURW AOPEN DVD/CD-RW (C) SONY DWD120A DVD=RW PLEXTOR DVD=RW 710A PLEXTOR DVD=RW 716A BENG DVOSRN 1665(C) LG DVD=RW 16X H110(O) LITEON 16X DVOLAW (C)

SMISLING YET DVD+RW(C) \$42

Ethernet 317 10/100 ETHERNET PCI DLINK 10/100 N/C PC \$30 529 DLINK 10100 SPORTS SWITCH 328 AIRLINK GROUTER 537 AIRLINE GUEB ADAPTER **DLINK DHIDA ROUTER** CLINK DI-704P ROUTER 352

DLINK DIADA G ROUTER 167 LINKSYS WRTS4G ROUTER LINKSYS WRTS4GS ROUTER 235 LINKSYS WRTS4GC ROUTER UNKSYS 802 11G ADAPTER

CHICN

PODIA PAGO PODIA NP153 204 SHIEDUNG M. WID LASER 2005 903-000 2219 CLPSIO COLOR LASER **EPRON** 210

200

Barebone System

ASSIS PUNINT-PER ABUS TO-PHI ABUS PUNDIT-PHS SNUTTLE SOSIP HUTTLE SNEEP SNUTTLE SN2103

\$210 5557 5579

Upgrade Kit MIEL CELEBON DOIN -PA MIN- DIME DOI

MIEL PAT 2820 CPU + PA 2020 + A 1239 DOOR ATT CASE WITH JOHN POWER SUPPLY

PAPEDO SE PAPEDO E DX PAPEDO ADX PAPEDO D-X POWD D2-WS POWD D2-WS ABN32-SLI DX ABN-E ABN-E ABN-SLI \$100 \$222 572 \$113 5123 \$115 ABRID-MVP DX 5229 PSI DZ 3106 **ABN-SLI PRE** POLDE DX 504 570 \$173 ABV ABB-X 5118 PSND32-SLI DX \$234 KBU-X \$70 \$50

SAMSUNG

17" 713N LCD \$229 19" \$40B LCD SILVER \$239 \$279 19" \$40B LCD BLACK \$359 17" 740B LCD \$285 19" \$40BF LCO \$389 \$349 20" 204B LCO BLACK \$889 17" 173T LCD 17" 740T LCO \$499 20" 204T LCD \$129 21" 214T LCD 19" 970P LCD \$790 \$229 40" 400P LCD 19" BOTMB CRT BOOR SATA HOD 882 504 160GB IDE HOD STO 160GB SATA HOD 2000B IDE HOD \$81 2800/B IDE HOO \$86 2500B SATA NOO

acer

19" 19188 LCD 5290 20" ATZODYW LCD-TV 8570 58, VLSBLAM PCD-LA 5010

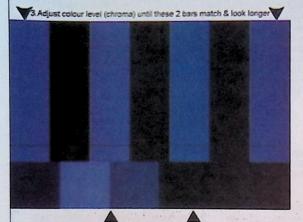
30" AT3001W LCD-TV Apar Assira MMTMI M Membanii FOCA 15.4"HVIDA, HLANDA DVD-75V

\$799

CHARACAR \$87400

* Cull us for the best price ab 1884, ASUS, ACER, FUJITSU.

Figure 3



4. Adjust hue or tint until these 2 bars on the top row match & look longer above: SMPTE Bars viewed through blue gel or via blue gun

of the picture which can be done either electronically if your display is super fancy-pants or via a primary blue gel like I use. Getting a primary blue lighting gel is important or you'll miscalibrate.

[3] To set the colour level correctly, adjust the colour control back up until the two outside top bars are equal in brightness to each other while. looking through the gel. This is pretty apparent because the thin strip. underneath each bar is made of the opposite colour you're trying to match with. When both outside bars just look longer through the blue gel, you've got it set correctly.

[4] The final adjustment is hue or tint. This adjustment uses the two inside colour bars that sit on either side of the middle green bar, which are coloured cyan and magenta. Adjust the hue or tint control until these two bars are equivalent and just look like long bars. Same as with the colour level. Take a look at Figure 3 to give an indication how it should look in the end.

One more thing though, turn sharpness completely off because it doesn't do anything good to your signal and it certainly doesn't make things actually sharper. If you've gone through all the steps then your display is as calibrated as any punter can get it. Good times.

By Andrew Carruthers



Calibration DVDs and software



Cisco Training WinNET Produced 126 CCIEs





Ravi Chandran CCIE # 8671, Tetu



COE # 10373. Bet Nexxia



Terence Summerville CCE # 8927, Infostroun



CCE # 9454, Bitl Ca



Santosh Koshy



Darryl Soeths CIDE # 11992, Birt Conada



5. Kanagasundarpi CCE # 12417



Nigel Maharaj CCIE # 9916, IBM Global Service





CCIE # 10425. Telus



Edwin Lukach



Geman Mahmood



Gluseppe Glorgio



flenkseren Somsoundarum CDE # 11904, Sturonir









Syed Mukhtar CCIE # 11513





Ahmed Khan CCE # 11146



Nadsem Akbor



Amir Syed



Sunil Soporis



Andre Julien CCIE e 12142, Teles





Zar Starossiski COE # 11575 Teles









Craig Henriques CCIE # 11180, Network Builder





tmran faugir CCIE # 12172, CIII



Aby Uddin CCE # 12158. Outsource IT







More CC/Es: Names and Numbers

Mehrdad Mostatayi, CCIE # 10383 Sorumathy Wjayakumar, COE # 1036 Muhammad Aamir, CCIE # 11429 Harnik Dhillon, CCIE # 11839 Felix Trinh, CCIE # 11994 Lawrence Imeish, COE # 12000

CCNA

\$399

CCIE Theory / Lab **CCIE Bootcamp**

Cisco Security Combo

CCNP Module

\$599

CCVP - Voice Over IP

CCIP- BSCI/BGP/MPLS/QOS

CWNA - Wireless



The courses are designed by HARITH KARIAPPER Triple CCIE - SP.Security & R/S B.Sc.Eng., MIBM, CNE, MCSE, MCT, CCNP,

CCDP,CCIP,CCVP,CCIE #8661

Visit the best CISCO lab in Toronto

- Over 450 Cisco routers 7500, 4500, 3600, 2600, 2500.
- VOICE Gateways, IP Phones, Call managers, Unity, IPCC. Catalyst 6509, 5500, 3550 and 2950 switches.
- ISDN lines, ADLS line and frame relay circuit.
- 35 CCIE Pods, each includes 9 routers and 2 switches (3550).

FREE CCNA or MCP FOR EI RECIPIENTS

HI-TECH TRAINING & CONSULTING

TORONTO 1200 Eglinton Ave. East, Suite 100, Toronto (Don Mills & Eglinton)

Tel: 416.447. www.winnet.ca

Wireless wonder

Sonu's wireless home theatre rocks, but can be tricky to set up

Everything seems to be wireless these days - home networks, videogame controllers, keuboards and mice - but with the exception of the TV remote, our beloved home theatres remain wired shut.

So Sony (www.sonystyle.ca) decided to cut the cords with its DVD Wireless Home Theatre Sustem [model # DAV-FX100W; \$1,299.99], a "home theatre in a box" (HTIB) on steroids, if you will, HTIBs usually include five speakers, a subwoofer, stereo receiver/amplifier and DVD plauer.

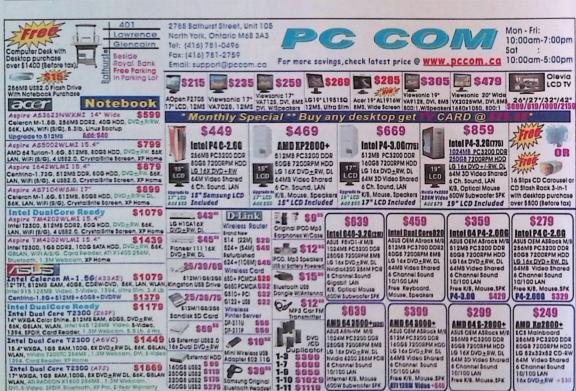
Sony calls this a "wireless" system because its rear floor-standing speakers can be placed at the back of your living room - without any annouing cables running alongside the couch, La-Z-Bou or coffee table.

The good news is that Sonu's wireless home theatre works - and well at that - but it can be a bit of a pain to set it all up, especially for those less technologically savvy (ironically, usually those who invest in a simpler HTIR solution).

What it is

Totaling 1,000 watts of power (5 x 143 watts + 285 watts for the subwoofer). Sonu's stulish DVD Wireless Home Theatre Sustem includes five speakers - front left and right, center speaker, rear left and right, a huge multidirectional subwoofer to place somewhere in the room and a thick silver component that houses a five-disc plauer and S-Master digital amplifier/receiver.





Actually, the receiver/amplifier may not fit in snug home theatre wall units as it measures 2.75 inches high by 17.5 inches wide by 16 inches deep, but it sure is a looker with its shiny face, minimalist buttons and aluminum ton plate. Sonu trades the carousel for a slot-loading mechanism, therefore you simply feed multiple discs into the unit one at a time.

This antiu-named Dream system, as Sony calls it in its marketing materials, offers a few bells and whistles not found in most other HTIRs. One is a HDMI (High-Definition Multimedia Interface) output, which offers the hest audio and video quality when connected to a HDTV set, with the proper cables. Even though your DVDs offer 480 (interlaced or progressively

scanned) lines of resolution, the HDMI interface can upscale the video quality to 720p or 1080i (and you can see the difference).

It also offers component, S-Video and composite ("RCA") output options, as well. Secondly, along with storing up to five DVDs (with progressive scan support) or music CDs, this unit can also read Super Audio CDs (SACDs), and can offer albums in 5.1 surround sound, whether it was recorded in multichannel audio or remixed and remastered from the original studio tapes. Burned CDs with MP3 music or JPEG photos can also be played on this unit. The receiver supports movies, TV shows or music DVDs with DTS [Digital Theatre Surround), Dolbu Digital or Dolbu Pro Logic II audio technologies.

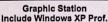




www.throne.com

OFFICE HOURS Mon-Frl: 9:00am-5:00or Sat: Appointment only Sun: closed









Intel Pentium D 840 3.2Ghz Extreme Edition Intel® D955XBK Deaktop Board nter Eull Tower with 500W Dower Sunnly Antec Full Tower with 500W Power Supply
10B DDR2-533 memory
2 x Seagata 300GB 7200rpm 8M SATAII/300 RAID HD
ATI FireGL V3100 128M PCI-E 18K Graphic Card
Picneer 16X DVD±RW, 124-n-1 reader, 1.44M Floppy
Viewsonic VP2030B 20.1* LCD Flat Panel

nsoft Keyboard & Optical r ideal for graphic designer

Super Quiet BTX Workstation Include Windows XP Prof.





1149

Intal Pentium D 820 2 5Ghz 2x1M cache Intal D34SGCZI. BTX Deaktop Board BTX Med Tower, Azarl.Q 17*LOF Flat Panel 512MB DDR2-533 memory Seagate 5GGB 7200pm 8M SATAIV300 hard drive 16X DVD-ROM, 1-4M Floppy ogitech Keyboard & Optical mouse ideal for professional user

Dual-Core Server with 2 workstations

15 Years in business: Best prices, quality and service

Include Microsoft Small Business Server 2003 Standard Ed (5 users) Plus 2 x Windows XP Prof, 8 ports switch & Ethernet cables Complete on-site setup & configuration included acom



55499

Windows

File Berver: Intel Pentlum D 930 3.0Ghz 2x2M coche Intel SE7320N11 server board Intel SE3258 server chassis 108 DDR2-533 ECC memory. 2 x WD 250GB 7200pm SATA RAID Series hard driva AceniL O 17 LCD Fild Penal Dual Layer 18X D'DCRW, 1-44M Fipopy Logliech Keyboard & Optical mouse

orkstations: vittum 4 830 3,00hz Proc Intel Dealtip Soart
In-Win Misor ATX case with 300W Power Supply
\$12MB DCR-400 memory
\$400 T200rpm SM SATA hard drive
AceriLG 17F LCD Flat Panel
DVD-RCM, 1.44M Flooty Drive
Logitach Kayhoard & Optical mouse

Ideal for new business, customization available

Dual-Core 1U Server





mid SR1475NH1 1U server platform
Fernium 4 Dusi-Core 520 2,80hz 2x1M ceche
108 DDR3-53 ECC memory
Secusio 30005 7200cm SR1NN1000 Histowap HD
Technic DRCD-RNN Combo Drive

ideal for Application Server, Web Server

Intel Xeon RAID Server





Intel Xuon 3.00Hz 2M cache processor Intel SE75208D2 server board Intel SC6300 Publishs hazala SO(IN Power Supply 2 High-flow System Fans, 1 Power Supply Fan 108 DDR2-833 SCO memory IB DDR2-833 EDC memory x WD 20008 T000pm 8ATA RAID Series hard di uni-Leyer 16X DVD=RW, 1, 44M Floppy igfach Keyboard & Optical mouse

Pully redundant action availab

Intel Bare-Bone Workstation



Celeron D 336 2.8Ghz \$399 Pentium D 805 2.66Ghz \$465

Med Tower with 300W PS 512MB DDR-400 memory 80GB 7200rpm 8M SATA hard drive 52X CD-ROM, 1.44M Floppy



Fulitsu N3410B Centrino 740







intel Pentium M 740 1.73 GHz Processor 512MB, 20GB HD, DVDSRW (+R double layer) 15.4" WXGA (1280 x 800) Crystal View 56K Modern, Intel Wireless 2200BB, 10/100 LAN Microsoft Windows XP Professional

Acer 4202WLMI Centrino Core Duo



Intal Core Duo T2300 1.88 GHz (Dual-Core) 512MB 887 MHz, 80 GB, DVDsRW (+R double lay 18.4" WXCA (1280 x 300) 24-bit Chystallonia 58K Nodem, Intal Wireless 3845ABG, 101100 LAN Microsoft Windows XP Professional

Network Attached Storage 1000S



32-on RISC Network Storage P SIZOR, Sleek 10 chasses with 19 inches \$ 12008, Sleek 10 chasses with 19 inches \$ Holl-plug hard diek trays (up to 278 or "hard drive not included" Hardhear RADO (1, 1 and 5, Olgabit Sith Bullhin Print Server and Printing quales יישכטרשת שנשנת כתפי

Intel D945GTPL ATX



125

Planeer let, 16Y DVD-RW write



HP 3500N Network Color

Antes Overture ATX case MOW Power Bunnie

Linkaya RV082 VPN Router

NOWALL TE170 VPN Firewall til andes

infocus X3 DLP Projector

1270

Intel Pentium D 805



165

Logitech Internet Pro Desktop Ontical Black



Chanbro Micro BTX case MOW Power Bunchy

315

Ware SOOD-SLP SATA

Leightech Quickoam for 89

Seagate 60G IDE Hard Drive



192

wing & DVI 340

TO 25

ad for each or intereo, other forms of payment are on regular proces. Prices and evallability are autject to change with All prices are streatly 4% class

Home Entertainment

Users can also add additional components to this deck, such as a cable box or satellite receiver, video game sustem. VCR or personal video recorder.

Setting it all up

The four 43-inch tall floor-standing speakers [2-way height adjustable] were easy enough to snap together, first by aligning the mouths of the stands, then threading the speaker wire through the center of the base before securing each tower with screws at the bottom and back of the unit. In all, it takes about 20 minutes to put it together. You could, however, choose to mount the speakers to a wall instead.

I thought Sony included an extra component in the box by mistake until I figured out this system ships with a separate [and relatively small] amp that powers the rear left and right speakers.

It was setting up the wireless rear speakers that took some time to figure out. Sony adopted DIAT wireless technology (Digital Infrared Audio Transmission) to beam the audio to the rear speakers. Along with the extra

amp plugged into the wall and into the rear speakers, you also need to set up and align an infrared (IR) transmitter near your television (which plugs into your receiver/amp) and must face a matching receiver at the back of the room. You need a direct line-of-sight for this to work, so it may take a bit of trial and error, and slight furniture adjustments.

Fortunately, the pay off is worth the extra work to get the rear wireless speakers operational. The many DVDs I tested – The Lord of the Rings trilogy, King Kong and animated flicks such as Chicken Little – sounded crystal clear, loud and well-balanced between the lows, mids and highs. Music CDs and SACDs also sounded awesome.

Movie and music lovers in search of a complete home theatre solution with a few less wires to get tangled up in won't be disappointed with this Dream system. Just be forewarned it takes a bit of patience and savoir-faire to set it all up.

By Marc Saltzman





We welcome any inquiries you may have about batteries and accessories for laptops, PDA's camcorders, digital cameras or electronic devices.

Powermega replacement batteries are all brand new and compatible to the OEM standard with one year warranty.

1140, 13700 Mayfield Place Richmond, BC V6V 2E4 . Email: info@powermega.ca . www.powermega.ca

ILIGS PAMSOM for Intel Socket 775 CPUs or ECS PAMSOM for Intel Socket 775 CPUs or ECS PAMSOM for AMD Socket 754 CPUs or ECS PAMSOM for AMD Socket 754 CPUs or PAMSOM SOCKET 754 CPUS PAMSOM SOCKET 754 CPUS PAMSOM SOCKET 754 CPUS PAMSOM DORROW FOR PAMSOM DORROW FOR PAMSOM PAMSO

AMD Sempton 2800+ 5594 99 or \$22/mth
AMD Sempton 3000+ 5609 99 or \$22/mth
AMD Sempton 3000- 5609 99 or \$22/mth
AMD Sempton 3300- 5649 99 or \$22/mth
AMD Althon 64 2800+ 5649 99 or \$22/mth
Intel Celeron D 346. 5599 99 or \$22/mth
Intel Celeron D 351- 5634 99 or \$22/mth ntel Pentium 4 506..... \$714 99 or \$25/mth \$769.99 or \$28/mth ntel Pentium 4 641.

or Asus PSPL2 Mo or Asus P5PL2 Motherboard for Intel Socket 775
Panasonic 3.5" - 1.44MB HD Floppy Disk Drive
WDC146Gh SATA2/G00 Hard Disk Drive w/ 8Mh IX Parasonic 3.5" - 1.44MB HD Floopy Disk Drive IXVDC16006 BATAZJOO Hard Disk Drive wil 8Mb IXISTAND DOR-100 or DDR2697 RAM Memory IXChenton Bigm Md-Tower ATX Case wit 7 Bluss IXISTAND HDR269 Md-Tower Supply will buil Fan iXISTAND HDR269 Md-Tower Supply will buil Fan iXISTAND HDR269 Md-TOWER SUPPLY WILLIAM IXISTAND HDR269 Md-TOWER SUPPLY IXISTAND HDR269 Md-TOWER IXISTAND HDR269 Md-TOWER SUPPLY IXISTAND HDR269 Md-TOW

III Creative 985.2.1-350 wi/2 Speakers 5 Subwoofer if Rockwell 56K in Voicel Facilitation as 9 (2)-18 (1)-

MS Windows AP Home Open will de la Marranty

AMO Athion 64-3200* - 3 1009 99 or 337/mth AMO Athion 64-3200* - 31004 99 or 337/mth AMO Athion 64-3700* - 31004 99 or 456/mth AMO Athion 64-3700* - 31109 99 or 456/mth AMO Athion 64 z7 3000* - 31109 99 or 456/mth AMO Athion 64 z7 4400* - 3149 99 or 350/mth Intal Celeran D 345 - 3149 99 or 350/mth Intal Celeran D 345 - 3149 99 or 350/mth Intel Pentium 4 505... Intel Pentium 4 631... Intel Pentium D 805... Intel Pentium D 930...

Asus ASN-E Motherboard for AMD Socket 939 or Asus PSLD2 Motherboard for Intel Socket 775 Panasonic 3 5" - 1 44M8 HD Floppy Disk Drive I WDC 250Gb SATA2/300 Hard Drive Drive will 16Mb I 512Mb DDR 400 or DDR2 697 RAM Memory 1 512M5 DDH 400 of DDH2 607 HAM Memory I Enlight Beige Mid-Tower ATX Case wi 7 Bays I Enlight Trus 350W ATX v2.0 Power Supply wi Fari I 8-USB Ports and 1- Printer Port

93 - UBS Ports and 1- Printer Port
24 Aus ENBOS Silenorin vi 260M & TV-Qur PCLE
25 GS 4-H10A DVD-RVDTive vi Software
35 On-board 5-Channel Digital Surbound Sound
35 Crestive 383 5 1-950 wi 5 Speakers & Sulwood
36 Crestive 383 5 1-950 wi 5 Speakers & Sulwood
37 Crestive 383 5 1-950 wi 5 Speakers & Sulwood
37 Rockwest 564 file Violatified and 36 (PCI)
37 On-Board Gigatal Full Duplex Network Adaptar
37 Viewoonic VASCD Black 17 LOD Monitor
37 Keytonic 104 Enhanced 504 Touch Keyboard
37 Microsoft Wheel Moure Option Mouse wi Flad
38 control Wheel Moure Option Mouse wi Flad

MS Windows XP Home OPM w/ CD and Manual 5 Years Labour & 1 Year Parts Warranty

AMD Athlen 64-3200+..... \$1749.00 or \$40 mm AMD Athlon 64-3200+ \$1249, 99 or \$45/mid AMD Athlon 64-3500+ \$1304,99 or \$45/mid AMD Athlon 64-3700+ \$1334,99 or \$45/mid AMD Athlon 64 x2 3800+ \$1409,99 or \$52/mid \$1589.99 or \$63/m \$1179.99 or \$43/m Intel Bentlum A 500 \$4300 00 or \$440mg \$1304.99 or \$48/m \$1249.99 or \$48/m intel Pentium 4 631... Intel Pentium D 805... Intel Pentium D 930...

Bass P9323-9UIDs Motiverboard for Insi Societ 775 /
-Asia AB322-SLIDIs Motiverboard for AMD Societ 939 BP parasons 3 57 - 1 4488 Black Floopy Data Drive 3 WDC 32506 547 A2100 Med Print Print will 19M 310b DDR 400 or DDR 2 881 RAM Memory (2x512Ms) Senigre Stark Michael 19M 2 50b DDR 400 or DDR 2 881 RAM Memory (2x512Ms) Senigre True 400W ATX Power Buspty will 7 large 2 Senigre Stark Michael 19M 2 Senigre True 400W ATX Power Buspty will 7 large 3 Senigre True 400W ATX Power Buspty will 7 large 3 Senigre Stark Sta

C. 9 1 Earl S Carpool of 1 1 Car . Suite . Laurench			
AMD Athlen 64-3200+	\$1789.99 or \$60/mth		
AMD Athlen 64-3500+	\$1544.99 or \$62/mth		
AMD Athlon \$4-3700+	\$1874.99 or \$63/mth		
AMD Athlon 64 x2 3800+	\$1949.99 or \$65/mth		
AMD Attion 64 x2 4400+	\$2129.99 or \$71/mth		
Intel Celeron D 345	\$1999.99 or \$57/mth		
Intal Pontium 4 506	\$1729.99 or \$50/mth		
Intel Pontium 4 631	\$1834.99 or \$61/mth		
Intel Pontium D 805	51769.99 or \$59/mth		

PREMIER COMPUTER CANADA COMPUTER SPECIALS ARE SUGGESTIONS ONLY. THEY CAN BE CUSTOMIZED UNSTONE ON ONLINE, HTTP://WWW.PCCAMADA.COM DR BY EAR AT 419-201-2210.

\$1019.99 or \$38/mile

PREMIER GELERON UPGRADE BUNDLE | Intel Retail Celeron CPU w/Fan | 311 - see web | 312Mb DDR Ram, PC3200 | 346 - see web | 312Mb DDR Ram, PC3200 | 346 - see web | 3512Mb DDR Ram, PC3200 | 351 - see web | 35

- PREMIER COMPUTER CANADA UPGRADE BUNDLES - Sorry, no substitutions PREMIER SEMPRON 754 UPGRADE BUNDLE

AMD Retail Sempron CPU wir Fan 2000 - see web 3000 - see web 3000

PREMER PENTIUM 4 IPCRANE NUMBE
Intel Retail Pontium 4 CPU w/ Fan 506 - see web
Asus PSLD2Metherboard 631 - see web Asus PSLD2 Motherboard \$12Mb DDR2 Ram, 667Mhz Chenbro Mid-Tower w/ Enlig

\$1349.99 or \$5

PREMIER ATMINI DA INCRANT BRINDLE
AMD Retail Athlon 64 CPU wi Fan 3000+ se
Asus ASN-E Motherboard 3500+ se
512Mb DOR Ram, PC1200 3700+ se

Visit us online at www.pccanada.com for up-to-date pricing, new products, secure ordering & fast shi

Premier CPUs and Memory

Full List of Processors Online

Full List of OCZ & Corsair Online

Flash and Brand Name Memory Also Available Online

Premier Logino & Geassories

11.7 de 12.4 de 17.7 d

Full List of Cooling Supplies Available Online

VSI US DILIER INCIDENT SERVICE DE CONTROL DE

164 Mars 2015 MIN Common Play, Societ 155 - Hoyers 510 (EVL) 2015 18 2 164 cere well.

165 and well Amer PAPOLICA MILLIAND PROTECTION (LATT) for MILLIAND MILL

AGP Videocards

Full List of Video Cards Available Online

Social ATA Harri Diak Or

Pull List of Hard Drive Brands Available On

Primise United Artes Full List of Drives Available Citi

CD-R, CD-RW & DVD-1+R1

Cubing Ends and Adventure are Available

TRANSPORT OF THE PROPERTY OF





WWW.PCGANABA.COM 3311 LAKESHORE BLVD W

TEL# (416) 251-2215 FAX# (416) 251-2218

Unlock secrets on your DVDs

HUB reveals more Easter eggs

It's been six months or so since we looked at a handful of Easter eggs hidden on your favourite DVDs.

You know, those goodies you can find by pressing a combination of buttons on your remote, which may unlock little-known extras such as humorous video clips, games, music videos, celebrity interviews or behind-the-scenes footage.

No, these aren't the bonus features listed on the back of the DVD box — these are secret gems planted by Hollywood studios to reward movie fans for finding them.



Considering Easter is just behind us, we thought it fitting to reveal a few more of these eggs you can find on many DVDs todau.

The following are a few of our faves, each with step-by-step instructions on how to unlock them:

Star Wars Episode III: Revenge Of The Sith

Who knew Yoda was into hip-hop?

APC BackUPS 280VA

Street Price \$189

Our Price \$33

Watch the lean green dancing machine get his groove on by unlocking a hilarious clip of Yoda bustin' some moves with a posse of stormtroopers behind him.

To access it, enter the area called THX from the main menu, and then use the DVD remote to press numbers "11" [or "10+, 1," depending on your DVD player), followed by "3" and then "8," to launch the secret music clip.

"1138," by the way, refers to George Lucas' first feature film, THX 1138.

Toy Story 2: Special Edition

Pop in the second DVD from this two-disc set. Take a look at the main menu and you'll notice Woody's sheriff star. Use the four arrow buttons on the DVD remote to navigate around the menu until the star is illuminated.



Now press Enter (or Select on some DVD players) and you'll be treated to an animated outtake of Jessie's song. Now go back to the main menu and enter the Behind the Scenes area. Then select Publicity. Once inside, highlight the sheriff star again and press Enter. This will play an outtake clip of Woody throwing a baseball.

Lastly, when you're on the main menu again, do nothing and eventually one of those green aliens will make a cameo appearance.

shop online @ www.upsforless.ca

1 YEAR WARRANTY

Brand New Batteries Installed!!!

REPLACEMENT BATTERIES Brand New APC Equivalent

RBC2 \$19 RBC7 \$94 RBC3 \$39 RBC8 \$79 RBC4 \$33 RBC9 \$39 RBC5 \$39 RBC11 \$188

RBC6 \$76 RBC12 \$188

CyberPower 585VA AVR

Our Price \$35



APC SmartUPS 3000VA Rackmount 3U Street Price \$1299

Our Price \$699

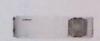
APC SmartUPS 1400VA Street Price \$599 Our Price \$229



APC SmartUPS 1000VA Street Price \$499-

Compaq R3000VA Rackmount 3U Street Price \$1499 Our Price \$499

Our Price \$169



UPS FOR LESS
experts in uninterruptible power supplies

CyberPower 725VA

Street Price \$149

Our Price \$55

www.upsforless.ca

TOLL FREE (866) 577-3628

WHY UPSforLESS?

- ON ALL REFURBISHED UPS SYSTEMS Up to 80% savings from new.
 - Canada's Largest Refurbished UPS supplier.
 - Government & Educational P.O.'s welcome.
 - Reseller Discount Programs.
 - We purchase old UPS systems
 - Trade-ins welcome

PC CyberPower

OVER 3000 UPS UNITS & BATTERIES IN STOCK 280VA - 5000VA

421 Bentley St. Unit 8 (NEW LOCATION!!!) Markham, ON Tel: (905) 477-9315 sales@upsforless.com Monday - Friday: 9 - 5



Seinfeld Season 6

Each of the Seinfeld DVD box sets contains many hidden goodies.

On Season 6, for example, pop in the first disc and select the Setup option from the main menu. Once inside, use the arrow keys to highlight the word Main Menu but don't press Enter just yet. instead, press the Left arrow button on your remote and then press Enter. Here you will see a clip of the Seinfeld cast talking about the Rob Reiner tribute.

Go back to the main menu and this time, enter the Extras area.

Here, highlight the word Running with the Egg, Part 1 and then press the Up arrow on the DVD remote and the poison spray can will illuminate. Press Enter for a humorous secret clip.

On the second disc in this box set, select the Extras option from the main menu. Now highlight the word Setup but don't press Enter just yet. Instead, tap the Right arrow on your remote twice and the pecan will be illuminated. Now press Enter to hear Jerry talking about little-known facts about the show.

Tru to find the secrets on the third and fourth disc - they exist.



Flightplan

Pop in the DVD from this Jodie Foster thriller and select Sneak Peaks from the main menu. Once inside, press the Left arrow button on the DVD remote twice and one of the in-seat display screens will be highlighted. Press Enter to watch an in-flight video shown during the film.

Go back to the main menu and select Special Features, and then choose In-Flight Movie: The Making of Flightplan. As you will see by your options, this documentary is made

up of a few different featurettes. Move your DVD cursor over to the D entry (called Connecting Flights) and then tap the Left arrow button on your remote. An arrow on the screen will now be illuminated, so press Enter to access the hidden clip of the film's executive producer talking about the impact 9/11 had on the making of this film.

By Marc Saltzman

LG T1

INTEL Core Duo,1.5GHz (T2300, 667MHz) 1GB RAM, 60GB HD DVD DUAL BURNER Intel 945GM 256MB. 14.1" Crystal Screen XP Pro, Bluetooth \$1749 3 Years Warranty

E22 PACIFIC MALL TEL:905 415 1182.

LAPTOP STORE NOTEBOOKOUTLET & Pacific Mall

WWW.NOTEBOOKOUTLET.CA 1-866-999-7555 AUTHORIZED DEALER & Steels Ave.

INTEL PENTIUM-M 1,73GHz.

512MB RAM, 60G HD.

12" XGA Touch Screen

DVD-CD RW



FUJITSU T4020A FUJITSU T3010

E22

LG P1

INTEL Core Duo 2.0GHz (T2500, 667MHz) 1GB RAM, 80GB HD DVD DUAL BUNER

ATI RADEON X1600 256MB 15.4" Crystal Screen XP Pro, Bluetooth 3 Years Warranty

INTEL PENTIUM N 1,2GHz

8.9" WXVGA Touch Screen

512MB RAW, 30G HD

Finger Print, Blueboth

WIN TABLET EDITION

FUJITSU P1510D

\$2149

LG Xnote Lw20 FUJITSU P7120 INTEL SONOMA 1.73GHz, 512MB RAM, 60G HD DVD DUAL BURNER,

802.11B/G WLAN 12" CRYSTAL SCREEN WIN XP HOME 4lbs ONLY

FUJITSU N3530

INTEL Core Duo,1.66GHz

512MB, (Free to 1GB)

DVD DUAL BURNER

15.4" Crystal Screen, WIN XP Media Center

(After 125 Rebate)

ATI RADEON X1400 128MB.

(T2300, 667MHz)

80GB HD

\$1749

\$1499

3.5lbs, 6-HR BATTERY \$2249 IBM Z60T-DVDRW

acc

INTEL PENTIUM-M 1.2GHz.

512MB RAM, 60G HD,

DVD DUAL BURNER

10.6" Crystal Screen

Win XP Pro

Fringer Print, Bluetooth

INTEL PENTIUM-M 1.73GHz 512MB RAM. **60GB HD SATA** DVD DUAL BURNER 802.11B/G WLAN Finger Print sensor 14.1" WXGA SCREEN Win XP Pro

Win Tablet Edition

ACER TM C301XCI INTEL PENTIUM-M 1.5 512MB RAM, 40GB HD DVD-CD RW

802.11 b/g WLAN 14.1" XGA TFT Win Tablet Edition (1 yr Aper warranty extended warranty \$1399 extended w

INTEL PENTIUM-IN 1.4GHz 512MB RAM, 40G HD. 802.11 b/g WLAN 12"GA Touch Screen

\$1799 Win Tablet Edition \$1399 25bs, THR BATTERY \$1749

ACER TM 3012WTMI INTEL CORE DUO T2300 (2MB L2 1.88GHZ 887MHz)

ACER FERRARI 4002 AMO TURION SA NEL-30

\$12RAM, 80G HD. DVD DUAL BURNER 802.11B/G WLAN ATI RADEON X700 129MB 15.4" WXGA, XP PRO, BLUETOOTH

Tyr Apar warranty, automobil variety available, recorditor) \$1598

Acer ASPIRE 5002WLMI

AMD TURION 64BIT 3000+ 512MB RAM, 80G HD, DVD DUAL BURNER 802.11G WLAN 15.4" CRYSTAL SCREEN WIN XP HOME (1 yr Acer warrenty, extended warrenty evallable, \$ 769 recondition)

ACER TM 2313LCI ACER AS 3623NWXMI

INTEL CELERON 1.5GHz 256MB RAM, 40GB HD (ADD \$39 to 512MB) DVD-CD RW 15" TFT SCREEN WINDOWS XP HOME (1 yr Acer warranty extended warranty available, \$ 559 14.1" TFT SCREEN \$ 599 recondition)

INTEL CELERON 1.5GHz 256MB RAM, 40GB HD (ADD \$39 to 512MB) DVD DUAL BURNER 802.11B/G WLAN

Blustooth, Build in Camera WINDOWS XP PRO ACER ASPIRE 5672WLMI

EXT DVD DUAL BURNER

Intel 950GM Express

12.1" WXGA TFT

512MB DDR2 RAM

800B HD SATA

INTELCORE DUO T2300 (2MB L2 1.58GHz 877MHz) 1024MB RAM, 100G HD. DVD DUAL BURNER, 15.4" CRYSTAL SCREEN ATI RADEON X1400 120MB Blustooth, Build in Camera \$1299 WIN XP Home (1 yr Aust warrants standad warranty ou

ACER TM 8204WLMI INTEL CORP DUO T2500

2NB L2 3.5GHZ 887MHz

2048NB DOR2 RAM 120GB HD SATA OVO DUAL LAYER BURNER ATI RADEON X1600 256MB 184" WEXDA 1000x1000 \$2249 Blustooth, Build in Camera WINDOWS XP PRO(1 yr Aper warranty extended warrenty ave

Vidcasting gives you shows to go

Vidcasting gives you shows to go

Hot on the heels of the podcasting revolution that allowed owners of digital audio plauers (DAPs) to download audio broadcasts to their portable machines, the fast-growing phenomenon of video podcasting accommodates the new wave of video-supported players such as the video iPod, Creative Zen Vision: M and Toshiba Gigabeat.

Video podcast, vidcast, vodcast, vlog or videocast are all terms for essentially the same thing: a Video On Demand service that makes segments of video available for download manually or through RSS feeds and then sunched to a portable media player with the help of a software rijent

Here are a handful of the web's top video podcasting aggregator sites - the places to go to find video content for your digital audio player.

iTunes

http://www.apple.com/itunes

Apple's iTunes Music Store offers a healthy selection of video content including music videos and a variety of TV and movie content that can be downloaded for free and auto-sunched with a video iPod through iTunes

Video content can be found in the Podcasts section of the iTunes Music Store under the "Video Podcasts" link.

By clicking on a show, you'll see a description and any reader

feedback and ratings that have been left. You can then select individual episodes of the show to download from a master list, or subscribe to the whole show through iTunes, which will then automatically download new shows when they become available.

Aside from independent vidcasts in a variety of categories including Arts & Entertainment, Technology, Travel and Business, iTunes also offers TV briefs from channels like MTV. Discovery Channel and G4 Tech TV - all for free.

7FNrast

www.zencast.com

ZENcast.com works in conjunction with the ZENcast Organizer software to allow owners of Creative audio players (including the video-capable Zen Vision:M) to download content and sunc it with

The majority of downloads at ZENcast.com are audio-only, but there are a handful of vidcasts in each section that are denoted by a separate icon. The vidcasts, all free, include video blogs and independent video podcast shows as well as corporate news content from sources including CNET, BBC and ESPN.

Content is divided into sections including Lifestyle, Entertainment, IT & Hardware and World Affairs with sub-categories.

Unfortunately there's no comments or ratings system to separate the wheat from the chaff. There aren't even full descriptions of the download, leaving users to take a chance simply based on the title.

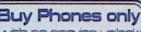
Phones, Phones & More Phones!

The Largest Selection @























www.phones4less.ca

Sources for vidcasts

Diggnation (digg.com)

Weeklu show based on the top stories from the technology news web site Digg.com. Hosted by Kevin Rose and Alex Albrecht.

Labrats (www.labrats.tv)

Tips and tricks about consumer technology, hosted by Andy Walker and HUB's own Sean Carruthers.

Learn Excel from MrExcel

[www.mrexcel.com/podcast/learnexcelpodcast.html]

Host Bill Jelen provides daily 2-minute video tutorials that cover some aspect of working with Microsoft Excel.

Photoshop TV (www.photoshoptv.com)

Hosted by National Association of Photoshop Professionals members Scott Kelby, Dave Cross and Matt Kloskowski, who provide news, tips and shortcuts on Photoshop and digital imaging.

Ripplecast (www.rippletraining.com/ripplecasts.htm)

This collection of movies and tutorials, created by Apple-certified instructors, covers advanced multimedia topics including image management, vlogging, editing RAW images and protecting video with watermarks.

ScreensCastOnline (http://screencastsonline.com/sco)

Hosted by Don McAllister, this weekly show is devoted to tutorials for Mac, iPod and iTunes.

TechToys Video Podcast (http://japantechtoys.blogspot.com)

For the Japanophile techles out there, this vidcast features coverage of tech expos in Japan and demonstrations of quirky Japanese gadgets. Like industrial robots.

Mefeedia

www.mefeedia.com

Mefeedia is home to more than 300,000 independent videos and videoblogs. The site supports RSS feeds and can integrate with iTunes and Sony's PSP Media Manager, Users must sign up for the free service. You can find some very esoteric stuff here, from independent art movies to burlesque game shows to autobiographical video diaries.

Content is ranked by popularity. There are descriptions for the vidcasts, and many of them have reviews (although it's unclear who's doing the reviewing.

> North 29

Digital Podcast

www.digitaloodcast.com

Digital Podcast is a podcast aggregator with a separate category for video podcasts, all content is free and supports subscriptions or individual downloads. There are good descriptions for each download, as well as a review sustem for feedback and a numerical ratings sustem. As well. content can be sorted in a variety of ways - something Digital Podcast does better than all other sites reviewed - including date added, title and rating.

Bu Erin Bell

J Computers

www.ucomputer.ca

4002 Sheppard Ave E.#108

416-293-9933

WE OPEN 7 DAYS A WEEK MON-FRI: 10AM-7PM SAT-SUN: 10AM-5PM

HEAD OFFICE

Scarborough:

North York Office MON FRT: 10:30AM-7PM

Unit 108

Sheppard Ave E

#4002

Years labor & I year parts Warranty

North York: 416-250-5588



\$62.99 after \$30 MIR

Intel CeleronD 2.8G \$288

Foxconn 661FX7MI-S M.B DDR 256M PC3200/Lan W.D 80G 7200rpm H.D LG 52x32x52 CDRW Video & 6-Chan Sound o/b Midtower Case/450W Keyboard / Optical Mouse/ SPK

Intel C2.93G/P4-2.66G \$298/\$328

AMD SP64 2800+ \$368

Royal Bank

ASUS K8V-X SE M.B K8T800 DDR512M PC3200/Sound W.D 80G 8M 7200r H.D. LG H10A 16x DVD/RW /LAN ASUS GF Fx5200 128M/TVO Midtower Case /450W P.S Keyboard/ OPT Mouse/SPK

AMD SP 64 3000/3100 \$378/388

Intel P4 - 506 2.66G \$418

ASUS P5VDI-X M.B DDR 400 512M PC3200 W.D 80G 8M H.D / LAN LG H10A 16x DVD+/-RW ASUS GF MX4000 128M /TVO Midtower Case / 470W P.S. Optical Mouse / Keyboard / SPK

P630 3.0G/640 3.2G \$498/\$538

Intel P4-630 3 0G 2M

ASUS P5GD2-X M B 4xSata DDR2 533 512M PC4200/G-Lan W.D 160G SATAII 8M H.D LG H10A 16X DVD RW ATI Rx300se 128M PCIE Midtower Case/470W P.S. Optical Mouse / Multimedia K. B. 600W 2.1 Subwoofer Speaker P640-3.2G/650-3.4G \$608/\$668

AMD64 939 3200+ \$648

GIGABYTE K8NF-9 M.B 1394 SATA DDR1024M (2x512M) PC3200 W.D 160G SATAII 8M H.D MSI 6600LE 256M PCIE I G H10A16x DVD/RW / G-LAN Midtower Case / 550W Power Supply Optical Mouse / Multimedia- K.B. 600W 2.1 Subwoofer Speaker

AMD 939 3500 / 3700

Intel P630 3.0GE 2M

ASUS P5ND2-SLI NF4 G-LAN DDR2 1G (2 x 512M) PC4200 MSI 6600LE 256M PCIE Maxtor 250G 16M SATAII H.D. LG 16x DVD/RW /8 Chan Sound Side Window Case / 550W Power Logitech Wireless Opt K.B & Mouse Altec Lansing 121 2.1 Speaker

P640 3.2G/650 3.4G \$799/\$868

\$225

\$238

\$235

\$235

\$295

\$310

\$286

\$379

\$385

\$448

PD-820 2.8GE (Dual Core) \$848

ASUS P5LD2 M.B I945P 1066FSB DDR2 533 1024M PC4200 Maxtor 250G 16M SATAII HD LG H10A 16x DVD+/-RW 8-Chan Sound & Gigabit LAN O/B ATI Rx1300 256M PCIE DVI Side Window Case w/ 550W Power Logitech Wireless Opt K.B & Mouse Logitech X-530 5.1 Sub-w Speaker

ASUS A8N-SLI M.B NF4 1394 GBU DDR 1024M (2x512M) PC3200 MAXTOR 250G 18M SATAII H.D LG H10A 18x DVD RW IG-LAN XFX GF FX8800GT 128M DDR3 Midtower Black Casal 550W Dual Fan Logitech Keyboard & Optical MS TomMade 2.1 Subwoofer Speaker 19" Samsung 920N 8ms 700:1

al Core 4200+I4400+\$129

LCD SPECIAL!!

17 " AOC Lm760 12ms LCD

17 " VIEWSONIC Va702B LCD

17" LG 1751S 12ms SLV/BLK 17 " Samsung 740N 8ms 600:1

19 " Viewsonic Va902B 8ms

19 " Samsung 920N 8ms 700:1

19 " Acer 1916W 16:10 Wide Screen

19 " Samsung 940B 8ms Digital 19" Viewsonic VX924 4ms Digital

19 " Samsung 940BF 2ms Digital 20 " Viewsonic VX2025MW 3ms 800:1 \$480

Hard Drive

Kingston USB 512M/1G/2G Flash W.D 80G 8M / 160G 8M W.D 8M 200G/250G/320G

W.D SATAII 8M 160G/250G/320G Maxtor 16M SATA 250G/300G W.D 36G/74G/150G 10000rpm Raptors \$119/179/329

Seagate 8M SATA 160G/250G/300G 2.5" Toshiba 16M 40/60/80/100G

\$32/54/78 \$56/78 \$89/96/130 \$105/125

\$87/102/125

\$75/95/115/159

Video Card ATI R9550/9600 256M APG ATVP.C. 9600Pro 258M AGP

ATUSAP X300SE 128M PCIE ATI/SAP X1300 258M/ 512M PCIE \$84/99/138 ATUSAP X800GTO GDDR3 258M PCIE ATUSAP X1600Pro 256M / 512M PCIE ASUS GF 8600GT 128M / 258M DDR3 PCIE

\$168/185 XFX GF 7900 GT 258M PCIE ATI/SAP Radeon X1900XT 512M DDR3 Dual DVI \$595

DVD/CD-RW

LG 16x DVD-ROM LG 52x32x52 CDRW

\$35 Prices subject to change without notice. Cash price, already 4%

\$23 \$25

LG H10A 16x DVD/RW PIONEER 110D 16x DVD/RW

\$42 \$45

LG DVD & CDRW Combo

\$68/82

CRR/100

\$125/148

2168

\$399

\$85

Organize your stuff

Collections are hard work.

I'm reminded of my father, who owned thousands of pieces of vinyl. For each of his albums he manually typed detailed information - cataloging not just track titles and band members, but also producers, engineers and guest artists - on colour-coded pieces of paper which he then filed in a library of more than a dozen black binders. He used red sticker tape to number his albums so he could find them. Needless to say, months of his life were poured into the management of his collection.

Alas, his obsessive collector gene was passed on to me - though my vice



Handheld Barcode Scanners

Many organizer applications that handle items with barcodes provide users the option of entering data via a handheld barcode scanner. These devices can be pricey, but if your collection is big enough a scanner can shave days off of your initial cataloguing effort.

The catch is finding one; barcode scanners are typically sold to industry rather than consumers. If you can't find one at your local electronics store try searching online.

The Microvision Flic scanner (www.flicscanner.com) is recommended by many collection software developers. A tethered version goes for around \$120 at most online retailers while a wireless Bluetooth model will run you around \$300.

A slightly cheaper option is the Xi1000 from POS-X (www.pos-x.com), which can be found selling for as little as \$75 on some websites. Plus, it comes highly recommended by point-of-sale industry experts for its durability and ease of use.



Personal Computing

is movies rather than music. I've managed to amass more a thousand DVDs, and I recently decided that I wanted to begin cataloging them. However, I wasn't about to haul out an old typewriter and a sticker gun. My tools would be a bit more modern: a software application and a handheld scanner.

The trick was in determining the best application for the job; there are dozens of DVD collection software packages on the market. I ended up downloading and testing a variety of options before settling on Movie Collector from Collectorz (www.collectorz.com), a company based in The Netherlands that specializes in organizer applications for all sorts of collections, ranging from video games and comics to CDs and MP3s.

Movie Collector satisfied just about every need I had, and provided features to handle collection management tasks I hadn't even thought about, like rating each movie and tracking borrowed items, the latter much to the dismay of my deadbeat friends.

Once a DVD is entered – either manually by typing its name or digitally by scanning its barcode with a handheld scanner – Movie Collector draws from online resources such as IMDB and Amazon to populate the database with all sorts of information, including box art, names of cast and crew, a movie synopsis, genre and running time. This data can then be sorted and reports created, allowing users to access all kinds of collection stats, such as which DVDs they have yet to watch or the number of movies they own that were originally released in the 70s.

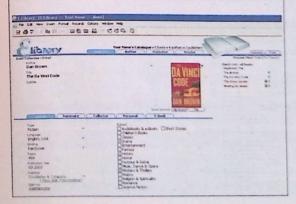
All of Collectorz' organizers function similarly to one another, which makes them an appealing option for managing multiple collections. The downside is that each application is sold separately, and they run around \$50 each.

Movie Collector whetted my appetite to try more organizers. I decided my modest collection of wines could do with some administration, so I downloaded Vintage Manager from Illinois-based Indian Wine

(www.vintagemanager.com).

This complex application runs a SQL backend (don't worry — everything is installed and configured automatically) and provides nearly comprehensive cellar management functionality. Once a bottle is catalogued by label, appellation, winery, and vintage, users can proceed to add a wide variety of additional information, including dollar value, tasting notes, reviews from critical journals, and matching recipes. If you have a large collection you can track each bottle's location by rack row and column number, and even set up multiple cellars.

Vintage Manager's presentation is a little rough around the edges – I noticed a number of typos and language problems – but these issues can be overlooked given the sheer power of the application. A basic





Resellers Welcome!

TECHNOLOGIES THE.
Unit 110, 13151 Vanier Place
Richmond, BC, V6V 2J2
Phone: 604-270-9699
Fax: 604-270-9899

version can be downloaded for a little less than \$60 while the professional version (used by many restaurant sommeliers) can be purchased for about \$120.

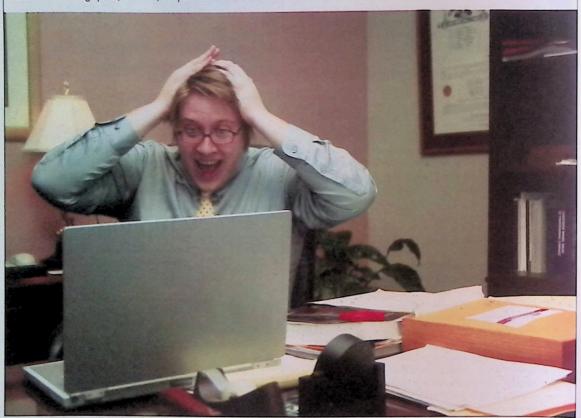
Bottles organized, I moved on to another of my collections; books. To manage my many Shelves of fiction and non-fiction I installed Graphicalic's E-Library [www.graphicalic.dk/e-library].

Sporting an accessible and intuitive graphical interface that allows users to quickly sort their tomes by title, author, publisher, and vendor, E-Library draws from an extensive database of widely available books to provide access to author biographies, abstracts, and publication information. Users

can also catalogue e-books, track which books have been borrowed from their libraries and access popular online book stores with a single mouse click. The entire package costs less than \$30.

Regardless of the composition of your collection, rest assured there is a specialized software application designed to manage it. All you have to ask yourself is whether it's worth spending a few bucks to get organized. To answer that question, I just think about the hundreds of hours my dad spent behind his typewriter.

By Chad Sapieha



SmartBuy Electronics

8392 Kennedy Rd, Unit14, Markham (Kennedy /Highway 7)



Super Value System

AMD Sampron2800+\$279 ASRock K8VM800 256M/80G/CDRW

Intel Dual core 805\$499 ASUS P5P800-MX

512M/200G /DVDRW



Notebook Outlet

Acer AS5003WLMI\$899 Turion 1.8G/15.4"W 512M/ 100G/DVDRW

Acer 3623NXWMI\$599 Celeron M 1.5G/14.1"W 256M/40G/DVDRW



HDTV Special



Free to Air Satellite TV

SmartBuy, fits your lifestyle! www.smartbuyca.com

•Dealers Welcome • Tel:905-475-7788 Mon-Sun:10:00a.m - 8:00p.m

Pansat 2700A \$189
Pansat 3500S \$219
Coolsat 5000 \$199
Coolsat 6000 \$219
Viewsat Platinum \$189

Viewsat Extreme\$199



Home Entertainment

5.1 Wireless Home Theater \$399 DVD Player and Recorder .\$149 High Definition DVD Player .\$99 MPEG4 DivX DVD Player .\$79

DVD Player with Karaoke . .\$59 2 Wireless Microphone . . .\$79

One Laptop per child

Can a \$100 laptop bridge the digital divide?

Poverty-stricken children in developing countries are in desperate need of many things: food, medicine, shelter, safety... and laptops?

One Laptop Per Child is a Delaware-based non-profit organization chaired by Nicholas Negroponte, professor of Media Technology at the Massachusetts Institute of Technology (MIT), founder of Wired magazine, and a founding chairman of the MIT Laboratory. The organization's goal is to manufacture

durable and robust laptops for what seems like the impossibly low cost of US\$100, and distribute them to children in developing countries around the world. The initiative is seen as a means of bridging the so-called "digital divide" that gives rich countries access to technology and the ability to communicate globally, while leaving poorer countries in the dark.

"Laptops are both a window and a tool," says Negroponte on the One Laptop Per Child web site [http://laptop.org]. "A window into the world and a tool with which to think."

Transform your Internet with the Power of Cybernet



The Best Value in Broadbar Get 12 Months for the price of 10

PLUS Free Modem

What's Included:

- ADSL PPPoE on telephone line
- Speed: 3MB x 800Kbs
- Data transfer : Unlimited
- ADSL Modem: Gnet BB0060 (\$100.value) Subscription term: 12 Months
- Setup fees: None (50\$ value)
 24/7 technical support
- 99.99% uptime guarantee

Give the Gift of Internet Access

PACKAGE INCLUDES:

- No Busy Signal
 9 E-mail Accounts
- 25 MB Web Space

- ➤ Webmail Access ➤ Anti Spam & Virus Filter ➤ 24 x 7 Live Technical Support

MAKE THE SWITCH TODAY >>

Toronto GTA Canada Wide

FOR YOUR HOME

PACKAGE INCLUDES:

- ADSL PPPoE on telephone line
- 9 Email Accounts

- Anti Spam & Virus Filter
 Personal Web Space
 Speed upto: 6MB x 800Kbs
- · Data transfer : Unlimited
- · Subscription term : Annual
- · Setup fees: None (50\$ value)
- 24/7 technical support

24

First Month FREE With Modem Kit Purchase

Web Hosting Plans

Unix-Bronze





- Unix Hosting
- 125MB Web space
- 4 Email Accounts
- Webmail Access
- Secure FTP Access
- Auto Responder 99.99% uptime

Windows-Bronze

Entry-level Win hosting

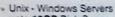


- Win 2003 Hosting 350MB Web space
- 10 Email Accounts
- Webmail Access
- ASP .NET. Perl. PHP

99.99% uptime

Virtual Servers

Reseller plan



- upto 10GB Disk Space upto 50GB Data Transfer
- Unlimited Email Accounts
- No Setup Fees!

www.mycybernet.net sales@mycybernet.net

Local: 416-410-2180

Toll Free: 1-877-292-7638

Negroponte's vision for the \$100 laptop involves seeing it become a ubiquitous fixture for schoolchildren. It would be textbook, communication tool and word processor all in one, and, failing that, it could at least serve as the only light source in the home.

While a \$100 laptop may sound like nothing but idealistic vapourware, it's actually edging closer and closer towards becoming a reality. Corporate backers for the project include Google, Red Hat, Advanced Micro Devices, and Brightstar Corp. On Nov. 16, 2005, a working prototype was unveiled by Negroponte and UN Secretary-General Kofi Anan at the World Summit on the Information Society in Tunis, Africa. On April 16 it was announced that Quanta

Computer Inc. of Taiwan had finished assembling the circuit boards and had shifted into post-production testing and debugging. Argentina is reported to have already purchased between 500,000 and 1 million laptops, and other countries including China, Nigeria, Brazil, India, Egypt and Thailand have also expressed interest.

Keeping the cost down

Several things are contributing to the incredible \$100 price tag, including drastically reducing the cost of the screen, trimming a lot of the fat away from the traditional laptop design, and implementing a business plan of mass-producing the units by the millions.

The laptop's screen was designed by Mary Lou Jepsen, OLPC's chief technology officer (and the former CTO of Intel). It's an eight-inch rear-projection display (as opposed to LCD) and runs in high-resolution monochrome mode for word processing, and low-resolution colour mode for things like Internet surfing.

The laptop has a 400MHz processor, three USB ports, microphone and headphone jacks, and a 128MB flash memory hard drive, according to the latest specs posted on the web site. The machine doesn't get that hot because of the relatively slow processor and lack of disk drive, so there's no cooling system.

The laptop features several ingenious design decisions, including a carrying strap that converts to AC cord and adapter, and a detachable hand crank for situations where electricity is not available — the







hand crank for situations where electricity is not available — the crank promises ten minutes of power per rotation. The prototype also features a hinge so that the unit can open up to a writing tablet, be flipped up to be watched as a video player, or used in traditional laptop fashion in conjunction with a QWERTY keyboard and touchpad.

Negroponte is also adamant about keeping the project open-source to avoid software licensing costs that run up the price of laptops at retail. "Today's laptops have become obese," he states. "Two-thirds of their software is used to manage the other third, which mostly does the same functions nine different ways." The \$100 laptop runs on Linux, a free

open-source operating system supplied by Red Hat (according to a Wall Street Journal article, Steve Jobs' offer of Mac OS X was declined because it was not open source).

Perhaps the most significant feature of the \$100 laptop is its promise of out-of-box access to email and the Internet courtesy of built-in WiFi. The laptops also have the ability to create a peer-to-peer "mesh network" with other machines, for areas where telecommunication networks are either non-existent or prohibitively expensive. This "mesh" technology is being developed at MIT; there's no clear word yet on how far the mesh network will be able to extend.



Social responsibilities

Certain voices are less than optimistic about viability of the \$100 laptop. Some argue that \$100, while a relative pittance by our standards, is still too expensive. The average daily wage in Ethiopia, for example, is US\$1 per day, while in Mozambique, minimum wage is only US\$53.3 per month, making even a \$100 laptop a luxury that many countries can ill-afford.

There's also a concern that the laptops will end up on the black market, sold by the children's parents for cash, and ultimately make their way into the hands of adults who see a laptop with Internet access as a valuable commercial tool. Negroponte has addressed such criticism by predicting that no more than two per cent of the laptops should fall into the grey market, because his goal is to make the laptop so pervasive that it would instantly be associated with the classroom. [He compares stealing the distinctively coloured and shaped laptop to stealing a mail truck.]

There are also social concerns. Just how useful will the laptops be if there's no educational infrastructure in place to help children understand how to

use them? Will the introduction of technology help the community, or merely disrupt it? How equipped are parents and teachers to monitor what children are doing on the Internet and protect them from its shadier aspects?

Asks technology blogger Dave Rogers, "Will all these connections facilitate education, or will they serve as distractions? The world needs doctors, engineers (the kind that know how to work with atoms — you know, "real" engineers) and lawyers, not just file-sharers and webloggers."

In a study published in 2002 called "Reconceptualizing the Digital Divide", University of California Associate Professor Mark Warschauer described cases where attempting to introduce technology into communities failed due to social factors that weren't taken into consideration. In New Delhi, for example, computer kiosks were installed into poor neighbourhoods with the goal of teaching children how to use the Internet. The initiative was only partially successful due to factors including lack of community organization, the fact that the community wasn't consulted about the

placement of the kiosks, lack of organized instruction on how to use the kiosks, and the unreliability of the Internet connection.

A similar initiative to modernize the small village of Ennis, Ireland by providing an Internet-ready PC to every family, a Web site for every business, and smart cards for each person, met with similarly disappointing results. According to the study, a visit to Ennis three years later indicated that "the town had little to show for its money. Advanced technology had been thrust into people's hands with little preparation. Training programs had been run, but they were not sufficiently accompanied by awareness programs as to why people should use the new technology in the first place. And in some social instances. well-functioning systems were disrupted in order to make way for the showcase technology."

The study observed that problems can arise with initiatives that are intent on providing hardware and software, but are not considerate of the social implications





of these actions, nor the fact that in many cases, social change must take place in order to properly receive the technology.

"Meaningful access to ICT [information and communication technology] encompasses far more than merely providing computers and Internet connections," Warschauer concludes, "Rather, access to ICT is embedded in a complex array of factors encompassing physical, digital, human, and social resources and relationships. Content and language, literacy and education, and community and institutional structures must all be taken into account if meaningful access to new technologies is to be provided."

Dr. Gillian Kerr, psychologist and founder of RealWorld Systems (www.realworldsystems.net), proposes rolling out the One Laptop Per Child initiative along with community training programs that teach users about the Web, and perhaps introductory games or other interactive programs to help young people create avatars and learn to communicate safely.

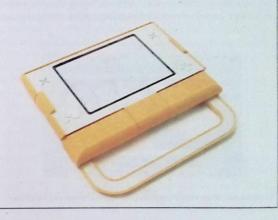
She stresses that OLPC has to be sensitive to how computers are used in the context of the culture they're being introduced to, and needs to create initiatives to monitor and minimize the destructive aspects as defined by that particular country. "Democratic involvement and participation in local decision-making is admirable in some countries and forbidden in others," she points out. "Educated and articulate girls are hoped for in some places and feared in others. Introducing societies to the internet will never be an easy or obvious process because all of the problems and opportunities of the global community are manifested on the Internet."

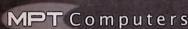
Despite the potential dangers, Kerr is uncomfortable with the idea of restricting Internet access to communities that aren't perceived as having the resources or sophistication to manage it.

"It's a bit like refusing to teach people how to read because they might get the wrong ideas. It's true that Internet access presents dangers to children, and responsible communities and programs need to build in safeguards, but I'm not convinced that those dangers are worse than the risks of illiteracu."

It's a sentiment that seems to sum up the One Laptop Per Child project nicelu, Idealistic and naïve, perhaps, but at least someone is making the effort to bridge the digital divide.

By Erin Bell





2370 MIDLAND Ave. Unit A10, Scarborough, ON, M1S 5C6 Canada TEL: 416-292-0533 hours: 10am-7pm Mon.Fri., 10am-5pm Sat. closed Sunday please visit our website at WWW.MPTCOMPUTERS.COM

15 years in business - while quantities last -prices subject to change





MP3 Car Companion plug in USB / flash media listen through car speakers

\$49



40GB Digital Photo Bank with 12-in-1 card reader high speed USB 2.0 \$149

Portable Multimedia Player

40GB capacity with TV-out DivX, AVI, JPG, MP3, WMA

\$199



Component to Component Component to VGA

SCALL





SCALL SCALL

HDMI to DVI HDMI to HDMI HDMI to DVI DVI to HDMI





One Button Backup Drive High Speed USB 2.0

from \$109



One Button Bakcup Drive portable, small, pocket sized

from \$119



Network Hard Drive RJ-45 10/100 Ethernet

from \$169



Mini USB Optical Mouse - wireless (RF) receiver stores neatly inside small, compact design

\$22



Wireless Optical Mouse - rechargeable via USB

- continue using mouse while it charges!

\$29



Wireless Optical Mouse - 2.4Ghz technology works from 30tt away

- rechargeable via USB

\$39



2-Way PS/2 KVM Switch - share one monitor, keyboard, mouse between two (2) computers \$29



2-Way USB KVM Switch with Audio - share one monitor, kboard, ms, spks between two (2) computers \$39



ENERMAX Power Supply NOISETAKER 370W @ \$89 NOISETAKER 485W @ \$99



ENERMAX Modular SLI Power Supply Enermax LIBERTY 400W @ \$99 Enormax LIBERTY 500W @ \$139

Moving to Mac: Intel Inside

The biggest news in the world of Mac (a small virus scare aside) is undoubtedly Apple's decision last year to transition its entire lineup of computers over to Intel processors. For some, it was a strange move: after all, the company had been touting the superiority of the PowerPC processor over Intel's models for a while, even going so far as to refer to the 64-bit GS processor as "the fastest processor ever" at launch.

A lot can change in a short time, however. Intel's chips kept getting faster and more energy efficient, while the G5 was finding it hard to keep up, especially in production numbers. With their continuing inability to get a G5

processor into a notebook form factor without melting all of the notebook's innards, Apple realized that a change had to be made. Thus the transition to Intel's new Core Duo line of processors in early January with the iMac, followed by the MacBook Pro in February and the Mac Mini in March.

During his keynote at MacWorld in January, Steve Jobs repeatedly pointed out that the move to the Intel processor would boost the Mac's speed by a factor of two to five times, and to show how peppy the new Intel iMacs were, he showed a few benchmark numbers. During my many years of benchmarking PCs I've learned to regard benchmarking numbers suspiciously, especially when there isn't a range of different tests involved in the benchmark. So I figured the best thing to do would be to get my hands on one of the new iMacs and give it a few speed tests against the most recent version of the G5 iMac.

17-inch Intel iMac www.apple.ca/imac \$1,499 and up

I got my hands on the 17-inch iMac with a 1.83 GHz Core Duo processor inside, and was able to compare it to a 17-inch iMac with a 1.9 GHz G5 processor with the same amount of RAM (1.5GB). There are a few other tweaks inside the computers; the Intel version bumps the bus speed from 633 MHz to 667 MHz, and increases the L2 cache from 512KB to a whopping 2MB to handle both cores. The graphics component has also been upgraded







from the ATI Radeon X600 to the X1600. All of these things should add up to a performance gain... but how much of a gain?

Surprisingly, Apple's claim of two to five times was pretty accurate not only with the SPEC synthetic benchmark it quoted during the keynote, but with real world applications too.

For example, rendering a seven-minute long Quicktime file from 640 x 480 H.264 into an iPod-ready file took the G5 machine about 18 minutes, while the Intel machine did it in just over 7 minutes.

Handbrake, a program designed to rip DVDs straight to MP4 files, took 20 minutes 49 seconds to render one chapter of a DVD on our G5 machine, while it accomplished that same task on the Intel machine in only 4 minutes and 17 seconds.

And in Adobe PhotoShop CS2, which many guessed would suffer for the move, the Intel machine managed to outperform the G5 in the tests we ran, including application of radial blur to a large image in 1 minute 40 seconds (intel) instead of 2 minutes 28 seconds (G5).

In other words, the bottom line seems to be that the speed of the Intel Macs really are faster than the G5, so long as you pick applications that are able to run.

By Sean Carruthers



Are your apps Intel-compatible?

One of the things that Apple hasn't exactly been trumpeting about the new Intel-based Macs is that they won't actually run all of the Mac applications currently on the market. It's not surprising, really: the switch to a new processor means that the code for many of these applications requires rewriting in order to execute properly, and some applications will be harder than others to convert.

While Apple made pretty sure that its core consumer-friendly applications were ready to go when the first Intel Macs went out the door, there are still a wide variety of applications out there — both from Apple and third-party developers — that aren't optimized for the new processors. Thankfully, Apple wisely included emulation software known as Rosetta, which is designed to translate PowerPC-compatible software into Intel-friendly instructions, but at a cost to performance. Unfortunately, until applications become "Universal" — that is to say, able to execute natively on either PowerPC or Intel Macs — a lot of software out there is theoretically hobbled.

The bad news first: most pro applications won't run at all on the new processors. That includes things like Final Cut (both Pro and Express), Aperture and Logic. Apple has promised that its pro applications will make the transition to Universal version within a matter of months, and users of the old versions can pay a small amount (\$30-60 depending on the app) to "crossgrade" to Universal versions of the software.

The good news is that the majority of software that currently runs on a G5 will execute on the new Intel machines, using Rosetta.

While Adobe surprised a number of Mac users by announcing that they wouldn't release a Universal version of its Creative Suite software until the next revision of the suite, it does seem to run on the Intel iMac.

A short list of things that seemed to work just fine on our Intel-based test machine: iLife Apps (iTunes, iPhoto, iMovie, iDVD, GarageBand); iWork Apps (Pages, Keynote); Safari; Firefox; iChat; Adobe Creative Suite CS2; Adobe Photoshop Elements; MSN Messenger.mac; Office 2004 (after an update) and Skype.

In addition to the pro apps, there were a few other things thing didn't seem to work on our machine. The first was Internet Explorer, but that's not all that surprising — in fact, Microsoft has stopped development on the Mac version of IE altogether.

The other item we tried that just simply didn't work was one we were really curious about, and that's Microsoft's Virtual PC, which allowed users to run Windows in emulation on their Mac. Again, that's not terribly surprising when it comes right down to it; even if it did work, it would essentially be running emulation under emulation, which would slow the machine to an utter crawl.

Thankfully, Virtual PC is no longer even an issue with the new Macs, thanks to the efforts of the folks at onmac.net as well as the Apple release of BootCamp beta, both of which allow Windows XP to be installed on your Intel-based Mac. But that will have to wait until next month's column.

Affordable High Speed Internet is a Reality! YOU HAVE A CHOICE!

www.tdcnet.ca/hub 905-947-8053

For availability please contact our sales team or visit our website BASIC HIGH SPEED HIGH SPEED 256Kb 3Mb Ultra 5Mb \$25.95 \$29.95 \$39.95

HIGH SPEED HIGH SPEED 3Mb Ultra 6Mb \$59.95 \$69.95

We Can Also Affordably:

- Design Custom Software - Create/Secure Networks - Host Your Website

- Provide Onsite Computer - Build Custom Workstations - Implement telephony & Server Technical Support - Register Domain Names recording solutions

We are an IBM, Microsoft, & Cisco Authorized Reseller

Business Directory

SATELLITE RECEIVERS FTA HDTV SYSTEM

OR4AM

acer

Coolsat*

KVIEWSAL

Pansat DIGIWAVE

11am-6pm Monday-Saturday

Metro Electronics 170 West Beaver Creek #1A, Richmond Hill, Ont. 416-704-7979

We are notebook specialist!

· COMPAQJBM TECHNICIAN · NOTEBOOK REPAIR • FREE ESTIMATE • motherboard, LCD repair. password remove · data recover · Thousands of laptop parts in stock

IBM, Toshiba, Dell, Compag Laptops

Compag P3-500/128MB/12GB/14.1TFT/CD 5249 Compag Evo P3-866/256MB/15GB/Cd Dell P3M-1.0/256MB/20GB/14.1/WI-FI TOSHIBA P3-1.0/256/20/Combo/WI-FI IBM P3M-1.13GHZ/256MB/30G/DVD IBM P4-1.6/256MB/30GB/14.1TFT/DVD \$599 Dell P4-1.8/256MB/30GB/15.1TFT/CD \$550

Laptop Parts LCD Screen.Battery CDROM, Floppy, DVD, CDRW.DVDRW.Memory HDD drive, Replicator Motherboard, AC adaptor Mini-PCI wireless card 30 days warranty

\$325

\$399

\$475

\$425

BEST \$\$\$ PAID

Used Computers. Laptops, Monitors, Printers, Scanners, **Networking Products**



purchase@compupoint.ca 905 696 9298 / 416 754 4812 PIV 1.8/2.0 225/250 PIV 2.4/2.8 325/375 PIII 1.0/933 110/95 PIII 866/733 85/75 PIII 667/500 60/50 17"/19" Monitor 40/35 SDRAM 256/128 29/12 Laptop PIV from 549 Laptop PIII from 249 Laptop PII from 129

www.COMPUPOINT.ca #5, 6325 Dixie Rd, Mississauga 905 696 9298 / 416 754 4812



Browse & Order Online or by Phone

sales@mycableshop.ca 1 866 449 4498

NK & TONER SHPPL

For Ink-Jet & Laser Printer / Copier Cartridges

80% savings!

Ink & Toner Cartridges Refill Compatible Ink Cartridges

Ink Refill Kits

Fax Films

Toronto Call:(416) 822-0918

Address: 50 Weybright Court, Unit 43

Business Hours: Mon. - Sat. 12:00noon - 6:00pm

Mississauga Call:(905) 275-8988

505 Queensway E., Suite 10E (Queensway & Cawthra)

Business Hours: Mon. - Sat.: 10:00am - 6:00



1stDataRecovery.com

Dead Drive Cleanroom Service \$40000 (with this ad only) From dead, deleted, formatted, fdisked, corrupted, virus infected. passworded, CD, water & fire damaged, overwritten, inaccessible devices: hard drive, raid, zip, DVD, Removable, optical, flash memory, tape, audio / digital image files ...

Forensic service 16 Years of Quality Service Windows / Mac / Unix / NetWare Data back in as little as 24 hrs.

Toll Free: 1-877-460-3670

Business hours: M-F: 10am-7pm Sat: 11am-5pm 157 Adelaide St. West, Suite 172 Toronto, ON M5H 4E 1050 W. Pender St. Suite 745, Vancouver, BC V6E 3S7 info@1stDataRecovery.com www.1stDataRecovery.com



NERDSUPPORT 24/7 Repair

PC, MAC & Laptop Laser Printers Repair Networking & Security WebHosting & Design

Call Us Now

1-866-300-5151



905-305-1205

- HD repair & data recovery

- Laptop, PC & Mac Hardware/ Software

- LCD & CRT Monitor (Buy LCD Monitor Parts)

Printer, Copier, Fax, TV

825 DENISON ST. UNIT 25, MARKHAM, ON. L3R 5E4 sales@suncomputers.ca www.suncomputers.ca

FTA Satellite T

Sales, Repairs Installation

- SALE: FTA receiver, Dishes JTAGS

DATA RECOVERY SERVICES

On-site or off-site, we recover your data back to you!

Specializing in:

- virus damage dead harddrives
- corrupted files deleted documents

Contact us now for your FREE OUOTE! Toronto: 416-232-2777 Mississauga: 905-486-1977

www.compumemories.com

BULK 100 CDs - \$99.00*

BULK 100 DVDs - \$149.00*

Also available - Blank CDs & DVDs. Disc Replication Thermal / Inkjet / Silk Screening, Insert printing, fully packaged CDs / DVDs

www.pro-CD.com, 1-877-887-4324 416-907-6764 (GTA), 1-877-887-4324 (Toll-Free

WHOLESALE INK & TONER

www.tnv.ca sales@tnv.ca

WHY PAY RETAIL, BUY ONLINE

FROM \$2.61 EPSON FROM \$4.35

FROM \$8.69

CONTINOUS INK SYSTEMS FROM \$69.99 LASER TONER FROM \$20.00

\$7.50(2OZ) - \$60.00(1lt)

FREE SHIPPING 15T ORDER, NEW CUSTOMERS ONLY

- Advanced DVD Authoring services for Motion Picture Film
- 8 & 16mm Films, Photos & Slides to Video or DVD
- Audio, Video, CD & DVD Duplication
- Professional Video Taping for Corporate & Televison Productions

- High Definition Video/VGA Projector Renta

Overseas Video Lab 1359 Wilson Ave. Toronto, Ontario

www.overseasvideolab.com

great prizes monthly at www.hubcanada.com

Take my card disc!



Business cards are the currency of new connections and we exchange them whenever we meet a new business or social contact. There is, however, a physical limit to what will fit on a business card - that is, unless your business card carries a digital payload.

Small business card CD-R disks are easy to come by and to record and, using these instead of a paper card, you can hand over a sophisticated playable presentation to add weight to your basic details. The presentation can be a brochure of your services, it can include still images and video output showing your skills and past achievements and it can even carry audio narration - it's up to you.

Before you think you have to hire a multimedia expert to do all this, think again. If you're using Windows XP then you have a tool for doing most of the work at your disposal in Windows Movie Maker. This program can combine audio narration, still images and video into a short movie that you can edit

> and burn to a CD and which will play in any computer with Windows Media Player or capable of playing WMV files. The process is simple and you can achieve quite sophisticated effects using it.

Start by planning your presentation and gathering together the bits you need to put it all together. You'll need a title and all the still images and descriptions you want to include in the movie as well as any movie content.

If you haven't updated Windows Movie Maker for a while, visit www.microsoft.com/windowsxp/ downloads/updates/moviemaker2.mspx download and install the free upgrade version 2.1 - it's a quantum leap better than the previous version. Launch the program and you're ready to import your images, sound files and movie clips. To do this choose File, Import into Collections and choose the files to import - bring in everything you might use - you're not committed to using it but it's helpful to have it all handy. Files appear inside Collections which you can view by clicking the Collections button.

To assemble the movie, drag clips or still images onto the timeline across the foot of the screen. Place the elements in the order they should play. If you need to edit movie clips you can trim them to remove pieces or you can split a clip in two and place another element between them, for example. When you trim or split a clip you're not altering the original so you don't have to make copies or take any special precautions.

To vary the time a still image appears in the movie, click it to select it and drag its right most sizing handle to the right - as you do you can read off the display time - let go the mouse when you have it set to the desired value.

Transitions and Effects add visual variety to your movie. Transitions affect the change from one clip or still image to the next and include swipes and



REFURBISHED SYSTEMS tel PIII 933 Mhz

Floppy Dirvi
 2 x USB Port

on Tower

Logitech Keyboard/Mouse/Speaker ; 23D Sound. - 17' LCD Monitor Bundle Settwares

Compag Tower Intel Pentium 4 2.4GHz - 256M RAM + 40GB HD \$299

own IP m/ CO a H

Word 2005 - MS Works 2005 MS Money 2005 - MS Picture is MS Streets & Trips 2005 MS Encarta Englando 2005

- Floppy Drive - 2 x USB Port NOTEBOOKS

- 128 MR SD B

ACER Aspire 3623LCI

ACER Aspire 3003WLMI - 512M8 DDR333, 80 G8 HD - DVD-Dual drive (DVD+/-kW)

TOSHIBA Satellite Pro M70 - DVD+-RW Drive - 15.4*TFT - 802.11g WLAN, 10/100 LAN \$999-55KV92 modern Sin1 Card R

REFURBISHED NOTEBOOKS

ISM Thinkpad Pea • 128M8 RAM • 10G HD • DVDROM Drive • 15*TFT Display

PERIPHERALS

Mistigad Position 4 1,868b MS RAM - 40G Hard Drive ROM & CD-RW Combo Drive

Deli Pentinm III 1.00liz - 256MB RAM - 20G Hard Drive - CDROM Drive - 16"TFT Display - 10/100 LAN - USB Port \$399

Visit our website for more FTA Receivers & Accessories

SATELLITE & FTA RECEIVERS Pansat 2700 Clone 18" Dish w/LIIB

· LE 5232252 COOW \$25

\$49

checkerboard changes. Effects change the look of the clip in some way such as changing its colour or rotating it 90 degrees (handy if you've shot video with the camera on its side). You can use only one transition between clips but, provided the effects don't cancel each other out [e.g. using

sepia and a colour effect), you can add multiple different

effects to a clip or still image.

Titles can appear between elements in the movie - for example you may have one that starts the presentation or appears before a new topic or segment or you can position them so they appear over a still image or movie. To create a title, choose Tools, Titles and Credits and choose whether to place the title before a clip, or on it and then configure its details.

To narrate your presentation, choose Tools, Narrate Timeline and click the Start Narration button, As you speak into your microphone, Windows Movie Maker records your voice as a sound track.

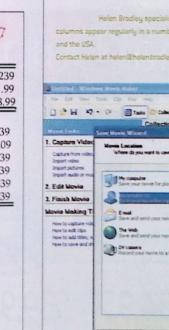
When you're done, save your project using File, Save Project - this saves a copy so you can edit it again later if needed. To encode your video, choose File, Save Movie File, select Recordable CD as the destination and click Next. Tupe a filename and CD name and click Next. Check to see that the movie will fit on your CD and, if not, choose different settings to bring the file size down, Click Next and the movie will be encoded.

You can, once this is done, return to your project and make another version of the movie to place on your web site, this time choose the Web as the destination for the movie.

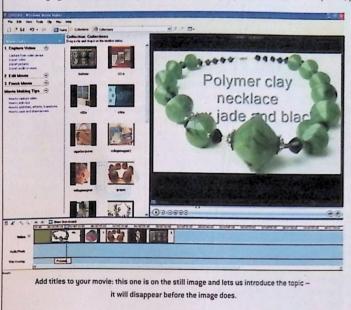


columns appear regularly in a number of publications in Australia, Canada, UK.

Contact Helen at helen@helenbradleu.com



or to add titles







benQ BlkWL KB + Mouse - \$49 Aopen 17" LCD - \$239 Cannon Pixma mp150 \$69.99 Dysan 50p 52X - \$11.99 Logitech WL KB + Mouse - \$20 Dysan 8x DVD-R -\$18.99

Refurbished Systems!

Dell Dimension - 2.4/256/40/CDRW/Windows XP - \$339 Dell OptiPlex 260 - C1.7/256/20G/CD/WinXP Pro - \$209 Compaq DeskPro - 1.0/256/20G Windows2k/XP - \$139 Compaq EvoSFF - P4 1.7/256/20/CD /WinXP Pro - \$239 Aopen Tower - P4 2.4/256/30-40G/CD/XP PRO IBM NetVista - P4 1.8/256/40g/CDROM/XP PRO - \$239

Financing Available! Don't pay for 3 Months!

Compaq Evo N610C NoteBook Penium M 1.8Ghz, 256M DDR. 30G Hard Drive, DVD/CDRW XP PRO, Docking Station



Dell Inspiron 1300 - Brand New -Intel Pentium M 1.73(533/2M) Intel GMA 900 / 80G / DVD CDRW Windows XP Home 15.4" WideScreen



ComputerBank 1185 Dundas St. East #1 L4Y 2LS Mississauga, On www.computerbank.ca Tel: 905-290-8458 Fax:905-290-7634

Age of Empires III

Publisher: Microsoft Developer: Ensemble Studios ESRB: Teen Rating: 4/5

Platform: Windows PC 13.0 GHz Pentium 4 with 1 GB of Kingston 400 MHz Dual Channel DDR RAM, and a 128 MB NVIDIA GeFORCE 6800 OC graphics card; displayed on an HP PL4200N 42" Plasma HDTV)

The third instalment in Ensemble's acclaimed RTS franchise doesn't introduce any earth shattering elements, but if you've enjoyed previous ADE games there's every reason to think this one will satisfy as well.

Set in the New World, players have the opportunity to play as eight great colonizing nations, ranging from Britain to the Ottoman Empire. Each force has its own set of strengths and weaknesses - the Russians, for example, begin with more resources than other countries, while the French



have a talent for forging relations with Native American tribes, allowing them to begin taking advantage of native trading and technology options more quickly.

Once the game starts its RTS business as usual. You'll gather

resources like food, metal, and wood and put them to use erecting buildings and growing your population, all the while exploring your surroundings and working towards various military and economic objectives. Like most strategy games, the key to success lies in ensuring that you build appropriate units for tasks currently at hand, such as cannons for town sieges and pikemen to protect against cavalry.

The franchise's gimmick of researching technology improvements and eventually upgrading the level of your civilization has returned largely unchanged - save the concept of home cities. Home cities are located in the Old World and act as a base from which to send advanced units to the New World. As the game progresses home cities grow in power and become capable of sending out a greater variety of support units.

If so little has changed you might be wondering why you should consider picking up a copy of ADEIII. That brings us back to the game's graphics, which, in my opinion, are pretty much a must-see.

Ensemble employed the same physics engine that powers Half-Life 2 to create stunning, unscripted animations, such as blades of a windmill being randomly blasted off by a squad of musketeers, and infantrymen sent soaring by the blast of a cannonball.

You'll need a pretty powerful machine to take advantage of all of the eye candy the game has to offer, but if you have the processing power it's definitely worth checking out.

By Chad Sapieha

Personal Data Protection

www.mysecuredoc.com



Protect your CONFIDENTIAL DATA in case your laptop or mobile device gets lost or stolen!

MySecureDoc PE+ features include:

- Pre-boot Authentication
- 256-bit Professional Strength FULL DISK Encryption
- · Power on Password and Self Help Password Recovery
- Portable Media Protection External USB drives. USB sticks. SD cards
- · Supports: Tablet PC, Multiple Hard Disks, Hibernation and Windows 2000/XP

\$24.95 \$34.95 \$59.95 \$

Resellers Welcome- Contact us at (905) 502-7000 ext. 275 Tiger Direct_ca





Your Passion... This is Ours

We put our heart and soul in every motherboard we engineer. Nobody else can say that about theirs. We are PCCHIPS, and we are passionate about what we do.

A3IGVI.0

- Socket 754 for AMD® Athlon™ 64 Sempron Processor
- · SiS 761GX / 964L Chipset
- FSB 800 MHz
- 2 DIMM for DDR400, max 2GB
- · Integrated Graphic, PCI-E 16x
- 6-Channel Audio



DUAL CORE SUPPORT



P21G

- Socket 775 for Intel® Pentium 4 / Celeron D Processor
- VIA P4M800/8237 Chipset
- FSB 800 MHz
- · 2 DIMM for DDR400, max 2 GB
- Integrated Graphic, AGP 8x
- · 6-Channel Audio



A21G

- Socket 939 for AMD® Athlon™ 64 FX / Athlon 64 Processor
- VIA K8M800/8237 Chipset
 2 DIMM for DDR400, max 2GB
- Integrated Graphic, AGP 8x
- 6-Channel Audio









(intel)

P25G

- Socket 478 for Intel® Pentium 4 Processor
- P4M800/8237 Chipset
- FSB 800 MHz
- · 2 DIMM for DDR400, max 2GB
- Integrated Graphic, AGP 8x
- 6-Channel Audio



AMD

M861G

- Socket 754 for AMD® Athlon™ 63 / Sempron Processor
- VIA K8M800/8237 Chipset
- FSB 800 MHz
- 2 DIMM for DDR400, max 2GB
- Integrated Graphic, AGP 8x
- · 6-Channel Audio



FREE Card Reader

Offer You Cannot Resist!

Receive a Free Card Reader (4-in-1) with every PCCHIPS motherboard you purchase. Offer good from 5/1/06 - 5/31/06. Ask your local distributor for detail.

Distributors

Powernode 905-474-1040 www.powernode.com Peripheral Express 905-513-5777 All hydernatis are proseded of their respective hillers little of Perfording are certed by lasts. ANDM: Allow 1944, Asiate 19 68 FX and relation 19 are ownered by AND, VAMS is based for via. SURF is several to be 1944.

Shopping Carts available for use now



MAY 2006

Webdog \$19.99/Each

MOTHERBOARD SAPPHIRE Crossfire2 PC-17rd400\$159 9 DFI LP-UT RDX200 Crossfire\$249.9 ASUS PSGD1-VM \$106.9 ASUS P5S800-VM \$66.99 ASUS PSP800-SE \$91 99 ASUS P5RD1-VM \$79 99 ASUS PSGD1-VM ASUS P5LD2-VM 8124.9 ASUS P5N32-SLIDLX \$229 9 ASUS P4P800-VM 598 99 ASUS P4P800 SE \$104.9 \$232.9 ASUS ABN32-SLI DLX

ASUS ABN-E ASUS ASN-SLI \$129.9 ASUS ABN-VM ASUS ABN-VM CSM \$94 99 ASUS ABV \$81 99 ASUS KBV-MX INTEL D945GTPL BIOSTAR P4M800-M4 BIOSTAR P4M800-M7 BIOSTAR K8M800-M7A \$58.99 FOXCONN 661FX7MI-S

VIDEO CARD

ATI A-I-W 2006 X1300 256M PCIES224 98 ATI X1800XT512M PCI-E SAPPHIRE X1300 512M PCI-E SAPPHIRE X1600PE SAPPHIRE X5005E 200M HM PCIE 560 69 SAPPHIRE X600PRO 256M PCIE 5114 60 SAPPHIRE X600GTO2 256M PCIES236 99 XFX GF7300GS 256M PCIE XFX GF6600GT 256M PCIE XFX GF7800GS 256M PCIE \$364 9 EVGA GF6600GT 128M PCIE EVGA GF6600GT 128M AGP EVGA GF6800GS 256M AGP EVGA GF6600GS 256M PCIE \$244 9 BFG GF7600GT OC 256M PCIE \$259 9 BGF GF6600GT OC 128M AGP \$199 9 BGF GF6600GT OC 128M PCIE \$204.9

HARD DRIVE

MAXTOR BOG BM IDE \$62.99 \$84.99 MAXTOR 160G 8M SATA MAXTOR 200G 16M IDE/SATA\$99 99 MAXTOR 250G 16M IDE/SATA\$106 99 MAXTOR 300G 16M SATA SEAGATE 160G 8M IDE SEAGATE 200G 8M SATA SEAGATE 250G 8M IDE SEAGATE 250G 8M SATA SEAGATE 300G 8M SATA \$126.99 WD 80G 8M IDE \$54.00 \$82.99 WD 160G 8M IDE WD 160G 8M SATA WD 200G SATA WD 250G 16M SATA WD 250G 8M SATA WD 320G 8M IDE WD RAPTOR 36G SATA WD RAPTOR 74G SATA TOSHIBA 2.5" 40G 5400rpm \$74.99

DOWNTOWN STORE LOCATION 396 College St. M5T157 416 921 0702 NORTH YORK 416 224 5553

20 Crown Steel Dr. Unit 16 L3RS20 905 513 9005

BRAMPTON artiny Bull Plwy #24, Bartiny's Sq. LEWSTI 460 1330

HAMILTON us St. #21 LSB2L6

SCARBOROUGH (NEW LOCATION 325-365 Bandurgh Cir Linit A102, Bandurgh Gard

01 DIVINI

INTEL C-D 325 2 53 GHz Biostar P4M800-M4 512MB DDR400 PC3200 **80GB 7200RPM Hard Drive** LG 16X DVD ROM ATX Tower wi 400w PSU

KB+MOUSE+EB990SPK

\$639

160GB 7200RPM Hard Drive

ATI 9600XT 256M AGP 8X

ATX Tower w/ 400w PSU KB+MOUSE+EB990Spk Free WEB dag cam+Foldup SPK

AMD 64 3200+

LG DVD-RW

ASUS ASV Sochet 939 512MB DDR400

\$ 299

\$ 299

AMD SEMP64 30004 256MB DDR400 PC3200 BOGB 7200RPM Hard Drive 1G 52x CD-RW ATX Tower w! 400w PSU

\$739

ASUS ASN5X Socket 939

ATI X1300 512M PCI-E

ATX Tower w/ 400w PSU KB+MOUSE+EB5100Spk

AMD 64 3700+

512MB DDR400

160GB Hard Drive

Free Foldup SPK

LG DVD-RW

\$ 359 INTEL C-D 331 2.66 GHz nn 661FX7MI-S 512MB DDR400 PC3200

80GB 7200RPM Hard Drive LG 52x CD-RW ATX Tower w/ 400w PSU KB+MOUSE+ EB990SPK Airlink wireless G54 PCI Web Dog cam

\$999

\$ 389

INTEL P4 506 2.66 GHz Foxconn 661FX7MI-S 512MB DDR400 PC3200 160GB Hard Drive LG 52x CD-RW ATX Tower w/ 400m PSU KB+MOUSE



HP IPAO HX 2790/ HX2490 / RX1950 \$399.99 / \$249.99

INTEL Pentium D 830 Dual Core AMD 64 X2 3800+ ASUS PSLD2 Socket 775 1G DDR2 533 Dual ATI X1600 PRO 256M PCI-E 160GB Hard Drive ASUS ABN SLI 1G DDR 400 Dual Prem 160GB Hard Drive LG DVD-RW LG DVD-RW ATX Tower w/ 400m PSU ELITECH Wireless KB+MOUSE Airlink wireless G 54 PCI adapter

\$ 1469

XFX 6600GT 256M PCI-E X2 ANTEC TX 10508 w/ 500w ELITECH Wireless KB+MOUSE Free Foldup SPK



Creative ZEN NANO 1 G \$149.99

WE BERT ROY ROUERTISED PRICE

Free WebDog cam

NOTE BOOKS Please call us for best price quote on quantities

Cost Price

HTTP://WWW.ICCT.CA Cost Price 10

\$980- \$674.99 Acer Ferrari 4002wimi « - \$1690 Compag NC6230 \$ 1949 \$1399 Acer AS3613 LCI \$1449

Pentium M760 2 OGHz RAM2GB, 120GB, DVD-RW 802.11b/g-WinXP Home ACER AS9404WSM ACER AS9402WSM Pentium M735 1.7GHz RAM1GB.100GB.DVD-RW.802.11b/g-WinXP Home ACER AS3623XCI Celeron M370 1 5GHz RAM 256MB, 100GB, DVD-RW, 802 1b/g-WinXP Home Pentium M740 1 73GHz RAM 512MB 40GB DVD-RW 802 11b/g-WinXP pro ASUS W5A IBM Thinkpad T43 (VPN 187165U) Pentium M760 2 OGHZ 512MB 40G XPP, COMBO, 14.1"802.11b/g \$2049.99 IBM Thinkpad T43

\$1149 \$694.99

HTTP://WWW.ICCT.CA

(VPN 1875M2U) Pentium M750 1.86GHZ 512MB 60G XPP.COMBO,14.1"802.11b/g \$1479.99 (VPN 1875DMU) Pentium M740 1.73GHZ 512MB 60G XPP.COMBO,15"802.11b/g \$1419.99 Celeron M390 1.7GHz RAM 512 MB 80 GB DVD±RW 802.11b/g - Win XP Home 15.4* 5899 99

Toshiba Satellite M70 MONTHLY SPECIAL

IBM Thinkpad T43

OCZ 1G KIT DDR400 PREMIER \$104.99 OCZ 1G KIT DDR2 533 VALUE \$101.99 OCZ 1G RALLY USB DRIVE \$52.99 OCZ 2G RALLY USB DRIVE \$119.99 OCZ 512M DDR2 533 WIHEATSINK \$59.99 CORSAIR 1G DDR2 533 SQDIMM \$109.99 CORSAIR 1G DDR2 533 KIT \$98.99 SIMPLETECH 1" 4GB MINI USB DRIVE \$98.99

DLINK WIRELESS ROUTER DI 524 DLINK WIRELESS G PCI ADAPTER DWL-G510 **DLINK WIRELESS G USB ADAPTER DWL-G122** DLINK 4 PORT ROUTER DI-604 DLINK 10/100MB PCI ADAPTER DEE-538TX DLINK 2PORT KVM SWITCH DKVM-2K

DLINK 2PORT KVM SWITCH USB DKVM-2KU

Elitech D-006 BK/WH Foldup speaker

\$49.99 \$43.99 \$43.99 \$35.99 59.99 \$31.99 \$41.99 \$41.99

MONITORS ver , lowest price duaranteed



866









BenQ FP71G+ 1784

99/\$294.99 \$279.99 LCD TV AND CELL PHONE IN STOCK NOW AT ALL LOCATIONS II

ALL BRANDS LG 1715 SB 17IN \$249.99LOWEST PRICES GUARANTEED

EOE



The best moments of my life: signing the international contract and sharing a pizza with friends.



For your professional accomplishments, you can always depend on the reliability of Brother imaging products to respond to your needs and those of your organization. Brother creates a line-up of printers, fax machines and multi-function centres that provide you with peace-of-mind, and extra time...for your friends.



Our extended range of monochrome and colour imaging products, for personal and network use, can give you the speed and versatility you need.



Our low acquisition, energy consumption and consumable costs, coupled with a nationwide network of authorized customer-care centres and machine lifetime toll-free technical support, will not only improve your lines of communication, but also your bottom line.



So whether your professional life takes you around the globe or around the corner, you can always count on Brother imaging and communication products to give you the best out of every day and every dollar.

For more information, call 1-877-BROTHER or visit us at brother.ca

PRINT

SCAN

COPY

NETWORK

Rise of Nations: Rise of Legends

After scoring a hit with the historical real-time strategy (RTS) game Rise of Nations and its expansion pack, Thrones and Patriots, Big Huge Games decided to do something a little different for its next project.

Rise of Nations: Rise of Legends, due out this month for PC, will be set in a fantasy world and will feature three unique races: the Vinci (steampunk inventors and tinkerers), the magic-using Alin (based on an Arabian Knights motif), and a mysterious alien race called the Cuotl whose ship has crashed on the planet.

HUB was recently treated to a sneak peak of the game in action courtesy of Big Huge Games VP of Development & Operations Tim Train.

"We love history games, and I'm sure we'll go back to history games at some point, but we really wanted to free ourselves from the constraints," explains Train. "Yes everybody's seen a phalanx, everybody knows what a phalanx looks like, there's no question about the musketeer, and there's only so many things you can do with that in terms of special effects. What does a phalanx have for special effects? Nothing."

Besides the new setting, which Train says will give the company a chance to flex its creative muscles and push graphical boundaries, the developers are planning to push the RTS envelope in a few other ways as well.

Economy

Players in Rise of Legends will be able to kick-start their economy with a few button clicks.

Train: "One of the things we're trying to do to move RTS games forward is to get rid of that whole 10 or 15 minutes at the beginning of the game where all you're doing is building up the farms, slaughtering whatever animal happens to be in the game, and all that sort of thing. Caring about "econ" is fun, raiding or defending against raids is fun — what's not fun is doing the same thing over and over again. We wanted to get you into decision-making a lot quicker."

Neutral sites

Neutral sites occur all over the map and can be either attacked and conquered, traded with to establish caravan routes, or bought outright with enough gold.

Train: "If you choose to attack the neutral sites early, then you're going to have to lose some of your army in order to take the site. So there's this inherent trade-off of, do you want to get the neutral site early on so your opponents can't get it, or do you want to trade with it over time and be more peaceful, at which point you can buy it or even get it for free later on in the game.

Buying or conquering neutral sites actually enables the player to build unique units that they can only get from that neutral site. So the conquest of neutral sites become very important."

Dominance

There are four powers in Rise of Legends that are awarded to players for satisfying certain in-game criteria. The Military Dominance, for example, is bestowed on the player who creates the most foot soldier units, and will grant them the power to lure enemy foot soldiers over to his or her side.

Another example is the Tactical Dominance, which is awarded for destroying a certain number of enemy workers, which grants the ability to cast the Ceasefire spell that temporarily renders your enemies incapable of attacking you.

Train: "There are all these different ways you can do stuff using the Dominance that rewards really clever play and not just 'let me just build up my giant mass of guys and let me throw them into the fray,' which is what a whole lot of RTS games are all about."

National borders

Each faction in Rise of Legends has a border around its territory that can expand and shrink when a player takes over new neutral sites or uses certain technologies. As a rule, players can't build outside their national borders (although there are certain spells that can get around that).

Train: "The whole idea of national borders was huge in Rise of Nations. The thing that made us just pull our hair out with most other RTS games was the whole idea of 'oh, you built a tower behind my lines and now! I ose the game because I didn't notice that you were building this castle behind my territory." That doesn't feel very realistic. It's not like empires are won or lost because I secretly built a castle right next to your capital."

Customization vs. randomization

All of the maps in Rise of Legends are custom-designed to ensure a degree of quality and control over the artistic look, but at the same time the studio didn't want to completely sacrifice the fun that random elements add to the mix.

Items like resources (raw materials), relic bonuses, neutral sites and certain elements of the terrain are all randomized in ways that can completely change the way a map plays.

Train: "For example, you might have a big mountain that blocks you off from the other side. This randomly generated object can be a whole mountain that blocks the entire map, so then it's a transport game where you have to build transports and land armies, or it could be that there are no centre or side passageways so the only way around is this one choke-point at the north end of the map, which is where all the fighting's going to concentrate. Or you could have any combination of those things, so scouting becomes really important. One custom map can provide all of these hours of different kinds of gameplay based on what the random elements are."

By Erin Bell



Be the Leader in Built to Order Notebooks

Be the first one there. The ASUS Z62F is not only the first whitebook available based on Intel® Centrino® Duo technology; it is also the first to support the long-awaited Common Building Block concept. CBB components are off-the-shelf, standardized, and plug into your whitebook chassis with ease - making business efficient and service a "snap."

*762F CBB components include balteries, hard drives, LCDs, and apt

Additional ASUS Whitebooks



- - 17" Widescreen Built-in Webcam
 - Integrated TV Tuner

- 15.4" Colorshine LCD - 256MB ATI X1600
- · Built-in Webcam
- -TPM Module
- · III-Compliant







MA*LABS

www.malabs.com 408.941.0808



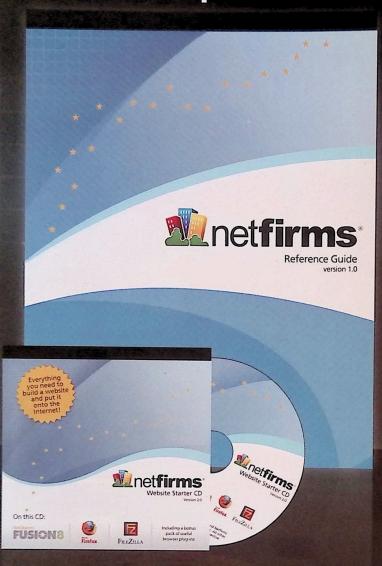


See more at usa.asus.com/hub1

www.synnex.com 800.756.9888

CANADA'S #1 WEB HOSTING

Your Complete Website Solution!



FREE Website Starter Kit



Every hosting plan Includes a 40 page Reference Guide, Starter CD, and Netfirms T-Shirt*

Get everything you need to build your website:

- Free professional design software
- Free domain names
- Free 24/7 support
- One of the most popular business class hosting plans in the world

Special offer for HUB readers: 10% OFF all hosting products

Netfirms Advantage Website Hosting

▶ Disk Space	20GB
▶ Monthly Bandwidth	750GI
Domains	2 FREE
▶ E-commerce	Yes
▶ WordPress 2.0	Yes
MySQL, PHP 5, Rails	Yes
► Shell Access	Yes
Email Accounts	100

\$1295 mo



Netfirms powers over 1 million websites worldwide.

1-866-761-6399

1-866-761-6399

www.netfirms.ca/hub



